

**DETERMINING THE SKILL OF CSE STUDENTS OF UNIVERSITY AND
STUDENTS OF TECHNICAL INSTITUTE IN BANGLADESH**

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This Report Presented in Partial Fulfillment of the Requirements for
The Degree of Bachelor of Science in Computer Science and Engineering

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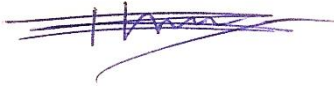
September 2021

APPROVAL

This Project titled “**Determining the Skill of CSE Students of Universities and The Students of Technical Institute in Bangladesh**”, Submitted by **Md. Mosaddek Hossain Sumon, Junayet Hassan Tamim and Sabbir Ahmed Shanto** to the Department of Computer Science and Engineering, Daffodil International University, has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on 09 September 2021.

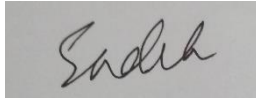
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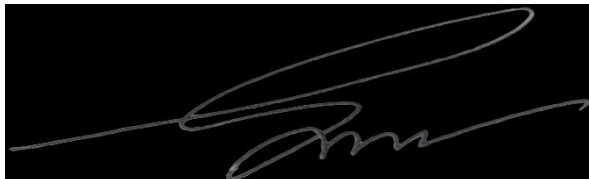
We hereby declare that, this thesis has been done by us under the supervision of **Md. Abbas Ali Khan, Lecturer (Senior Scale), Department of CSE, Daffodil International University.** We also declare that neither this thesis nor any part of this thesis has been submitted elsewhere for award of any degree or diploma.

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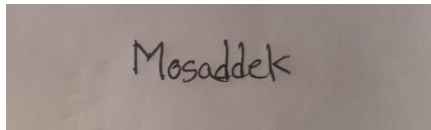
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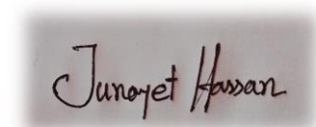
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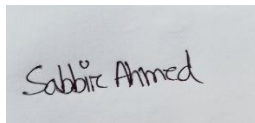
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ACKNOWLEDGEMENT

First, we express our heartiest thanks and gratefulness to Almighty God for His divine blessing makes us possible to complete the final year thesis successfully.

We really grateful and wish our profound our indebtedness to **Md. Abbas Ali Khan, Lecturer (Senior Scale), Department of CSE**, Daffodil International University, Dhaka. Deep Knowledge & keen interest of our supervisor in the field of Student Criteria to carry out this thesis. His endless patience, scholarly guidance, continual encouragement, constant and energetic supervision, constructive criticism, valuable advice, reading many inferior drafts and correcting them at all stages have made it possible to complete this thesis.

We would like to express our heartiest gratitude to Professor Dr. Touhid Bhuiyan, Professor, and Head, Department of CSE, for his kind help to finish our thesis and also to other faculty members and the staff of CSE department of Daffodil International University.

We would like to thank our entire course mate in Daffodil International University, who took part in this discussion while completing the course work.

Finally, we must acknowledge with due respect the constant support and patients of our parents.

ABSTRACT

To build up a career Technical Field is the biggest field in the world. That's why the students of this area are increasing day by day. Despite that, the outcome of this area is not good. That means the students are not successful at the end as they dreamt before admitting in this area. A survey of 2020 said that, the number of unemployed in Bangladesh is around 27 Lakh. Among the youth the unemployed rate is about 25%. We now know that, students from computer engineering or computer related background are suffering from this problem. We think, the content of the study is a cause of it. But there are other reasons behind it. Like, Students are not studying properly, the curriculum of University or Technical institutes are not job or career friendly or developing some technical skills. And students admitted intentionally or for family pressure. It is possible that social pressure is a reason behind it. A lot of students completed their study from technical area but build up their career in another field. Like, BCS Cadre, Entrepreneur or other Govt job. It's also possible that they don't have enough skill to get a job in technical field or they do job in other field intentionally. After studying four years from a university, is it possible that a student's skill is less than a student from a technical student? This research aims to find out the reason behind un-employment and determine the technical skill between students of University and Technical Institute students.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

CSE Graduates are increasing day by day. Some of them wants to build up their career in this sector, some of them doesn't have enough skills to build up their career. The population of Bangladesh is huge. But the opportunities to build up a career is also quite enough. But the applicant's skill and the requirements of these job in this sector doesn't match. Most of the applicants doesn't have the skill to get a job. We are doing this research on 1st year to graduated students of university to find out the reasons behind unemployment or how much they are learning that helps them in their future. Besides that, there are lot of students are graduated from Technical Institutes (DIPLOMA). Also, this research is about finding out the skill of technical institutes students, how much they are learning from their institutes, importance of doing BSC after graduating from DIPLOMA and the skill difference between the students of university and them.

1.2 Motivation

Unskilled and Unemployed are increasing rapidly. Because of their lack of effective knowledge and skills in their education. many of them are drop out Because they don't know what are they doing and they don't know what will be better for them? Some of them want to be something else. Maybe they will be successful in that side. After Completing their Graduations students of technical Institutions face Lots of Problems in job sector and many complications in their future life.

1.3 Research Question

The key questions that this study focuses on are given below:

- How many data need for this kind of research?
- From where we can get the data?
- How we analyze the collected data?
- Will we able to Determine the skills Gap of BSC and CE(Diploma) Students based on analyzing data?

1.4 Research Methodology

In the section of methodology of our research paper, we have collected Data, then we analyzed them, classified the data, selected Equation, then implemented them, after these steps we evaluated them. At the end of this chapter performance of the proposed paper will be described.

1.5 Research Objective

This paper will help to find out the reason behind unemployment of CSE Graduates and the skill gap between Graduates and industry requirements. From this paper we will be able to compare the gradual development skills between CSE Graduates and the students of technical Institutions. After analyzing the collected data, we can visualize the whole scenario of our skills and we can propose a decision.

CHAPTER 2

BACKGROUND

2.1 Introduction:

There are some paper talked about unskilled graduates, demand of skills of IT sectors but no-one talked about the exact reason behind this. Some paper talked about overall skills of students in Bangladesh. After completing graduation, what students of technical Institutions are doing? No-one talked about it and determine the skill gap between CSE graduates and students of technical institutions?

2.2 Related Work:

IT Sector is One of the most Demandable Subject in this modern world. This Sector makes our life easier than before but now a days we face a lot of problem in this sector. Some people talked about the problem like, the skill gap, demand of skill, reason behind the drop-out (BOU).

A.K. Ziauddin Ahmed [1], This paper is about the gap between the expectations of employers and the graduates. Overall, this paper focused on the requirements of employers and the quality of graduates.

Mohammad Mamunur Rashid [2], This paper is about the present status of DCSA program. It also said that the reason behind drop-out in academic or professional conflict. How many students got enrolled and how many of them were successful is also discussed on this paper. It also discusses about Why students failed, educational approach is a reason behind it or not.

Sajjad Zohir [3], This paper is about demand side issues (derive insight), Specific skill on ICT sector. It also said that the importance of IT sector for labor market.

Moshiur Alam [4], This paper is focused on the reason behind the supply gap between Netherland and Bangladesh in ICT Sector. It also said that the area where the Bangladesh ICT supply can potentially meet.

Fableeha Choudhury [5], This paper is also about the skill gap in ICT sector. Lot of Graduates come out but they have not enough skill that needed in the growing ICT world. It also said that some of them are skillful but they don't get any job because of some individual skill like English Communication or problem-solving skill.

Paper [6], This paper is about the development of skill of men and women. Nowadays women develop their skill better than man or not, monthly employment income is discussed in this paper.

Paper [7], This paper is about the importance of outsourcing in Bangladesh. In recent years, it also said that, outsourcing increases the GDP growth of Bangladesh almost 1%.

Enamul Hafiz [8], This paper is focused on, the industrial outlook of IT Sector in Bangladesh. Identify the existing problem that is faced by Technological industry and to know their economic conditions of foreign and local market.

Moriom Khatun [9], This paper is analyzed the ICT sector in Bangladesh and find out the satisfactory level of employee in this sector.

H. Karthik [10], This paper is focused on Global in-house Centers, Service provider delivery center, Outsourcing transactions, Operating cost etc. How much money governmentally and privately invest in ICT sector is discuss in this paper.

2.3 Bangladesh perspective

IT industry is one of the fast-growing sectors and this industry is the most booming sector in Bangladesh for the recent few years. It helps increasing our GDP rate. Our government now take some serious project to improve this sector like, setting up hi-tech parks, planning for launch a digital literacy centers and digital content industries etc. We have also faced many problems likes:

1. In 2020, unemployment rate was approximately 5.3 percent.
2. According to bids (Bangladesh institute of development studies) In 2019, graduates unemployment rate was 33.19 percent.
3. Graduates rate increasing day by day but no improvement in skills graduates' rate.
4. Skills gap between Graduates skills and Industries requirements.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

The methodology covers an absolute of four steps which conclude our research that is displayed in Fig. 3.1. The steps are the following:

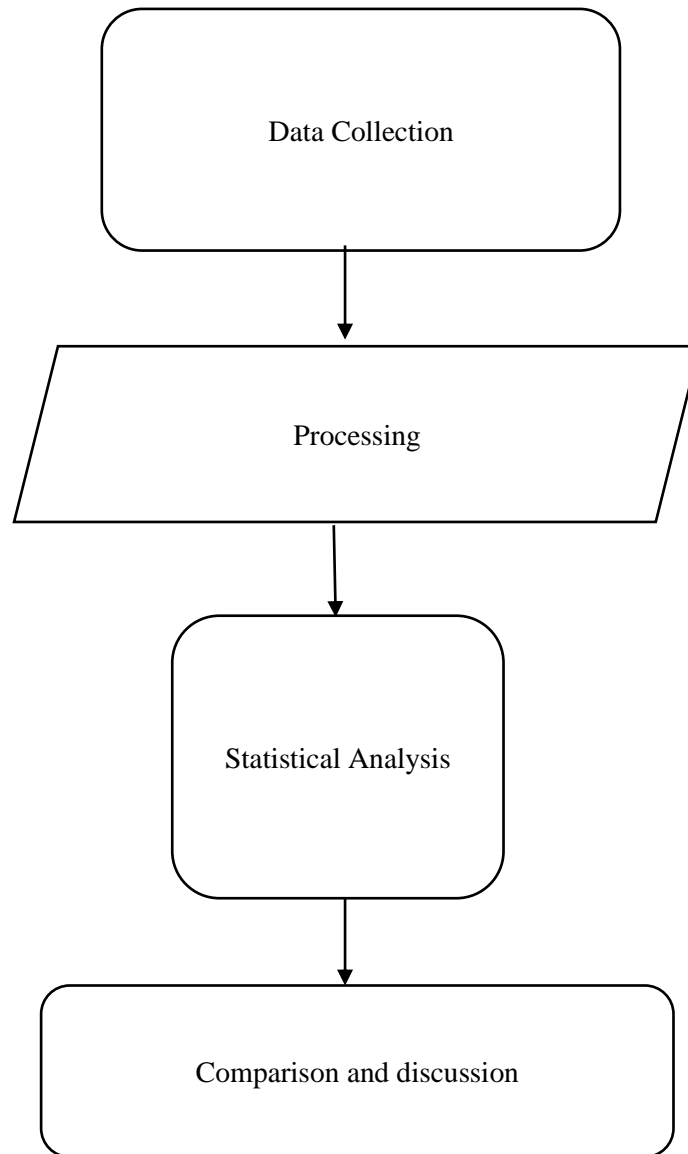


Figure 3.1 Methodology diagram

3.2 Data Collection

We have surveyed and collected almost 250 data. 150 data from CSE students and 100 from CE (Diploma). This survey was performed only for CSE students and CE(Diploma). We provide two google form one for CSE students another for CE (Diploma) students. We selected Some general questions for all. Then we divide our two forms into five parts. These are:

1. 1st year.
2. 2nd year.
3. 3rd year.
4. 4th year.
5. Graduates.

Our work is to perform statistical analysis on these data and find out what the problems are, if there are any.

All the questions and data are shown in 3.4 Statistics Analysis

3.3 Processing

1. Finding mean value: After completing our data collection, we have to find out the mean value of every answer of our dataset. We use a statistics formula to find out the mean value. Here is the formula:

$$\text{Mean} = \frac{\text{sum of observation}}{\text{Total Number of observation}} * 100$$

2. When we find the mean value of every dataset, we try to create some chart for our collected data like, Bar chart, Pie chart etc. These charts will help us to visualize the data much better.
3. After that, we try to analyze the data of University and Diploma, statistically and compare them.

3.4 Statistics Analysis

3.4.1 BSC

3.4.1.1 General Questions

1. Are you studying CSE intentionally?

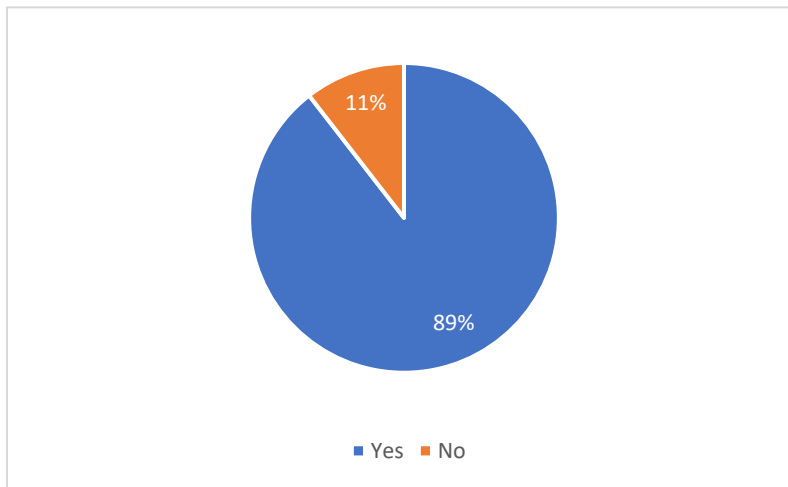


Figure 3.2: Pie chart, answer of the question 'Are you studying CSE intentionally?'

2. Did you want to be a programmer before admitting CSE?

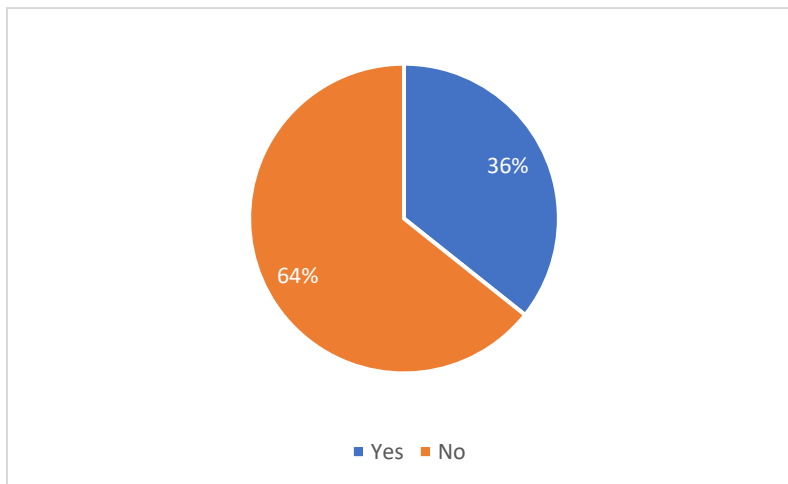


Figure 3.3: Pie chart, answer of the question 'Did you want to be a programmer before admitting CSE?'

3. After admitting CSE, did/do you want to be a programmer?

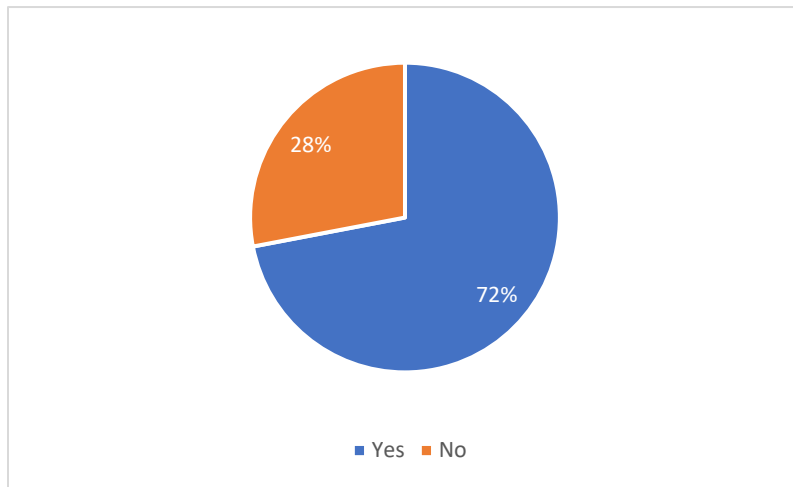


Figure 3.4: Pie chart, answer of the question 'After admitting CSE, did/do you want to be a programmer?'

4. If not programmer, what do you want to be? (Optional)

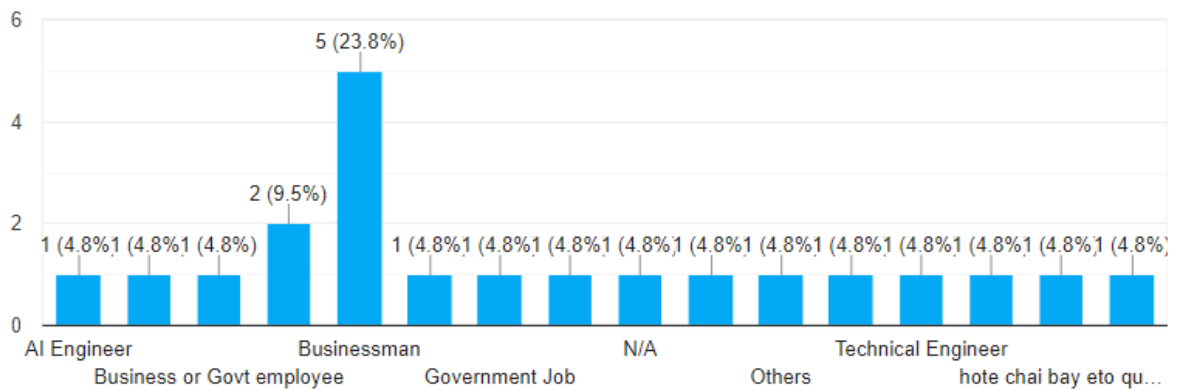


Figure 3.5: Bar chart, answer of the question 'If not programmer, what do you want to be?'

5. How many semesters your university has?

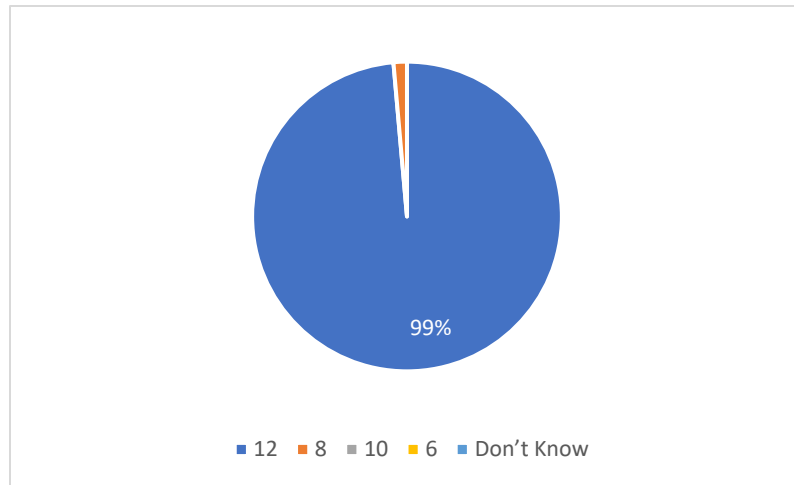


Figure 3.6: pie chart, answer of the question 'How many semesters your university has?'

6. Which year are you studying right now?

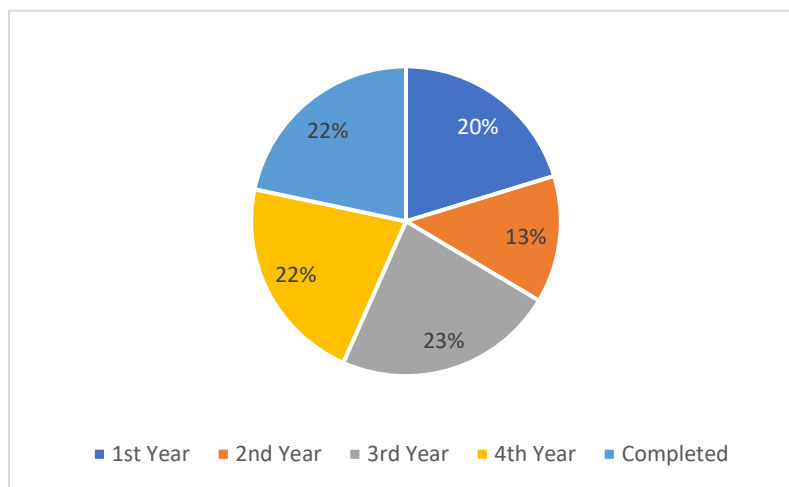


Figure 3.7: pie chart, answer of the question 'Which year are you studying right now?'

3.4.1.2 Common Questions for All Years

1. Do you understand while reading an English book?

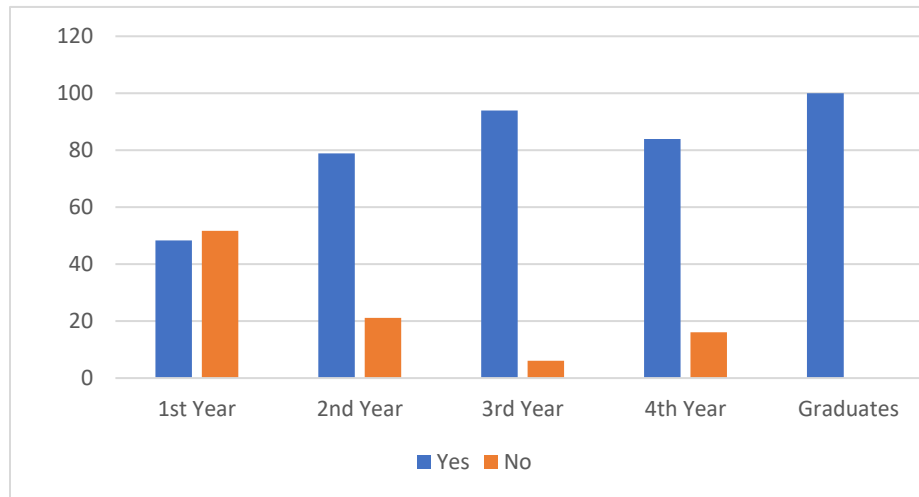


Figure 3.8: Bar chart, answer of the question ‘Do you understand while reading an English book?’

2. While watching an English movie, do you need subtitle?

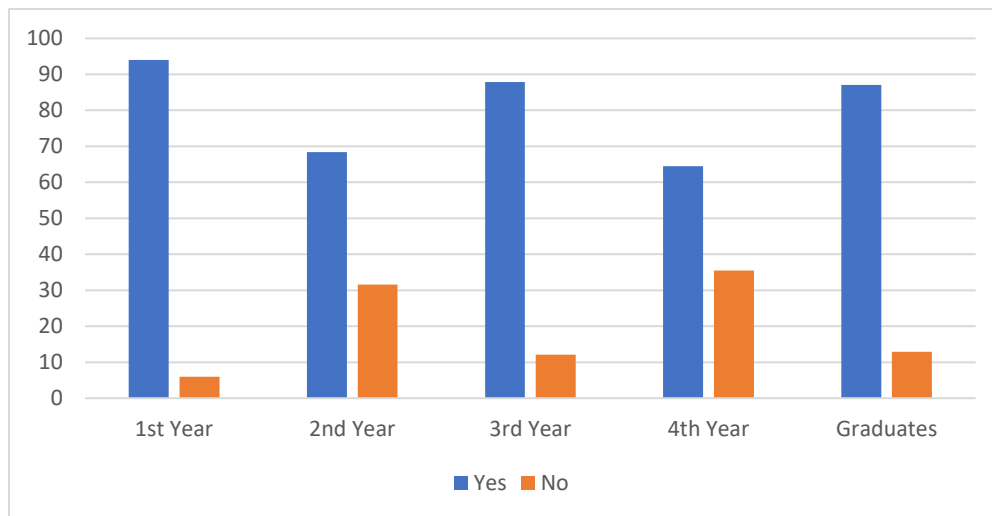


Figure 3.9: Bar chart, answer of the question ‘While watching an English movie, do you need subtitle?’

3. Do your teachers usually give slide/class note in English?

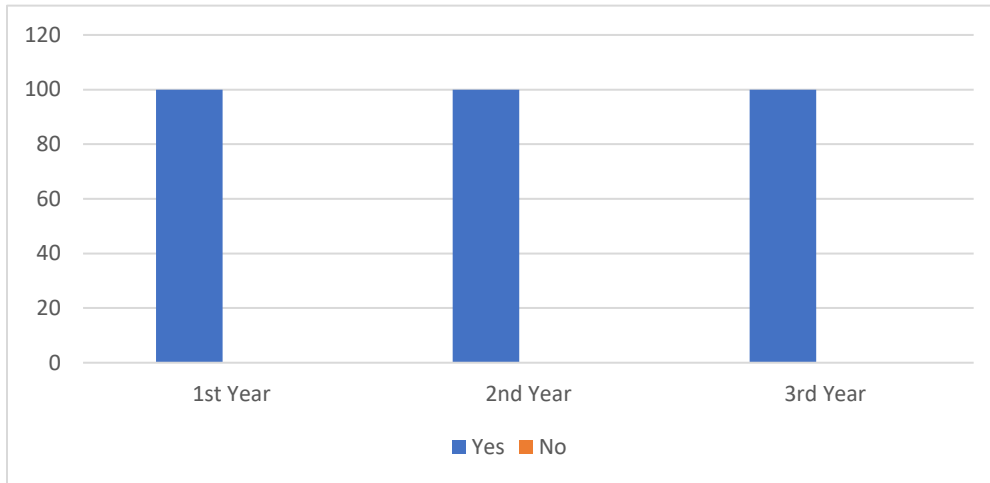


Figure 3.10: Bar chart, answer of the question ‘Do your teachers usually give slide/class note in English?’

Fig 3.10 says that usually teachers give slide or note. But we can see from fig 3.9 says that ,6% students from 1st Year,31.6% students from 2nd Year, 12.1% students from 3rd Year,35.5% students from 4th Year and 12.9% students from graduates don’t need subtitle while watching English movie. And fig 3.8 says that ,48.3% students from 1st Year,78.9% students from 2nd Year,93.9% students from 3rd Year ,83.9% students from 4th Year and all the students from graduates understand while reading an English book.

4. Which of the following Programming language you are good at?

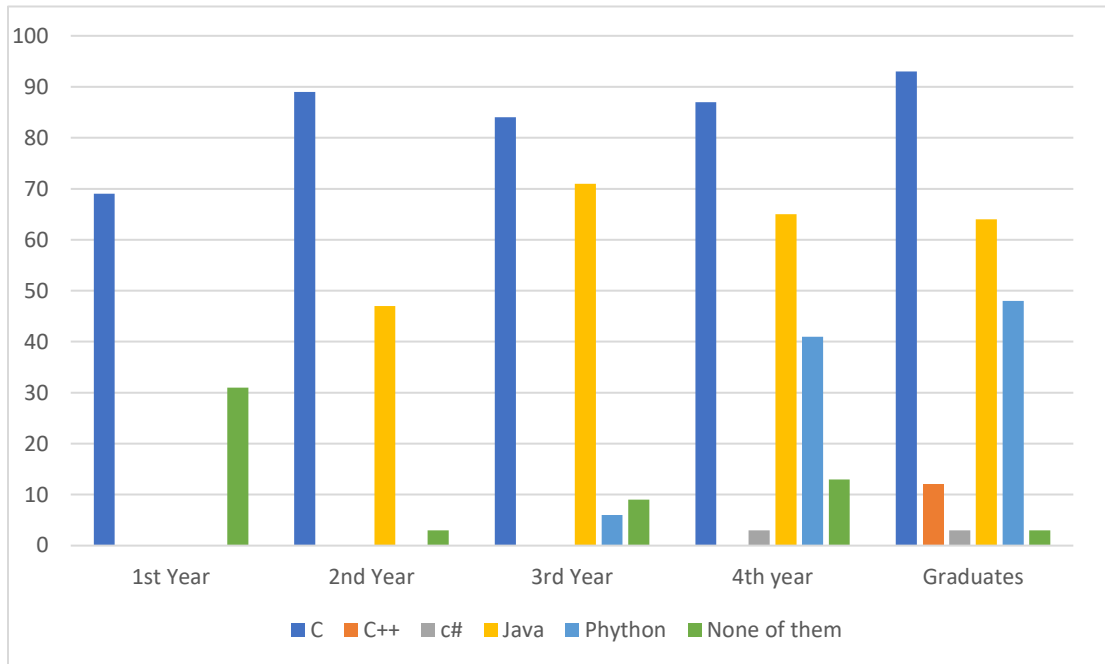


Figure 3.11: Bar chart, answer of the question ‘Which of the following Programming language you are good at?’

From Fig 3.11, In first Year,69% students are good at C language and 31% students are not good at anything. In 2nd Year, almost 89% students are good at C language ,47% students are good at JAVA and 3% students are good at nothing 3rd Year, 84% students are good at C language,6% students are good at python and 9% students are not good at anything. IN 4th Year,87% students are good at C language,3% students are good at c#,65% students are good at JAVA,41% students are good Python and 13% students are good at nothing. IN Graduates, more than 90% students are good at C language,12% students are good at c++,3% students are good at c#,64% students are good at JAVA,48% students are good at Python and 3% students still good at nothing.

5. If you know C programming, do you know what “stdio.h” library does?

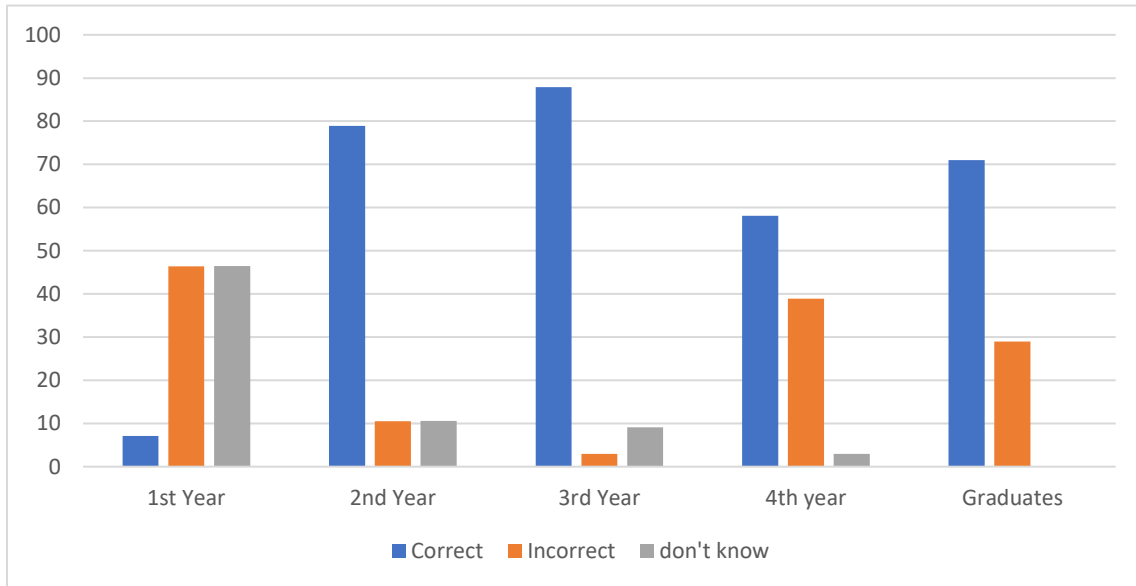


Figure 3.12: Bar chart, answer of the question ‘If you know C programming, do you know what “stdio.h” library does?’

6. In C language which function is used to take input from user?

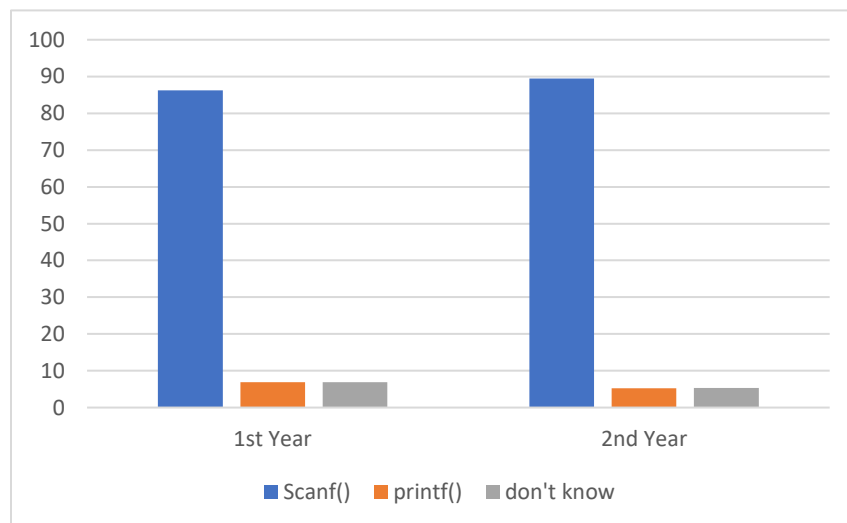


Figure 3.13: Bar chart, answer of the question ‘Which function is used to take input from user?’

7. Can you print “Hello World” using C language?

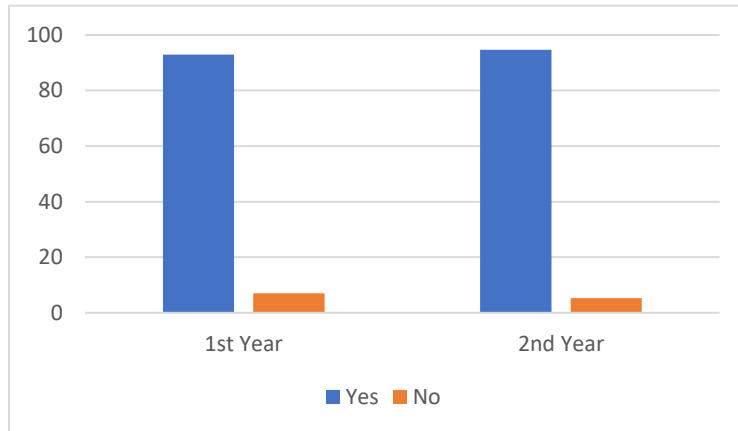


Figure 3.14: Bar chart, answer of the question ‘Can you print “Hello World” using C language?’

From Fig 3.14,93% students from 1st Year and 94% students from 2nd Year know how to print “Hello World” using C language. From fig 3.13 says, 86.2% students from 1st Year and 89.2% students from 2nd Year know how to take input from user in C language. And in fig 3.12, 7.1% students from 1st Year,78.9% students from 2nd Year,87.9% students from 3rd Year,58.1% students from 4th Year and 71% students from graduates know what stdio.h does in C language.

8. Did you participate in any programming competition?

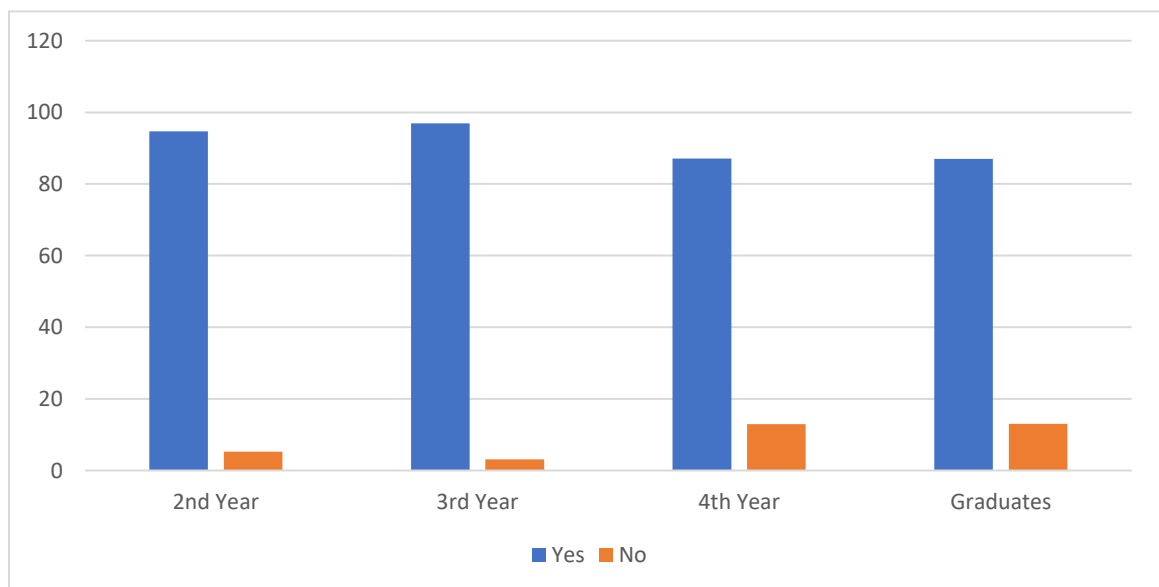


Figure 3.15: Bar chart, answer of the question ‘Did you participate in any programming competition?’

9. Can you make a WordPress Website?

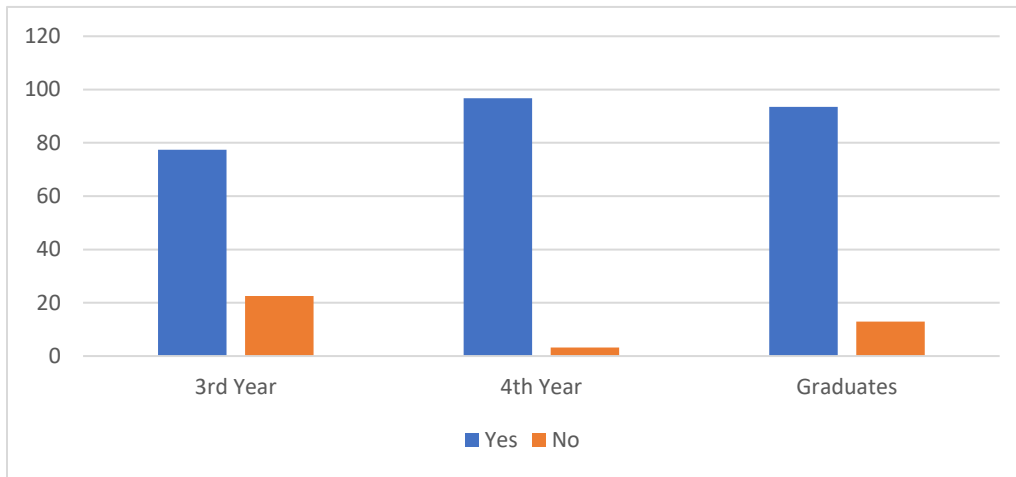


Figure 3.16: Bar chart, answer of the question ‘Can you make a WordPress Website?’

10. Have you completed any course from IT farm or anywhere else?

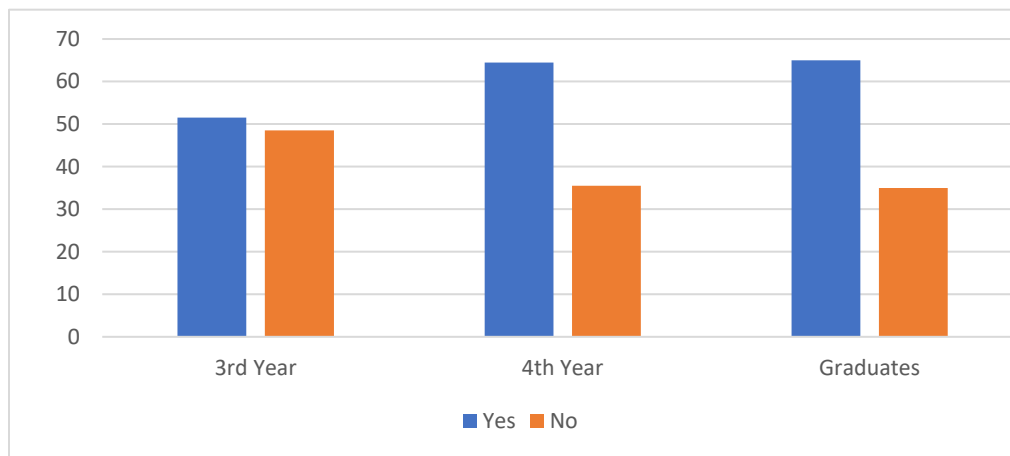


Figure 3.17: Bar chart, answer of the question ‘Have you completed any course from IT farm or anywhere else?’

11. Do you think that, it would have been better to do some course rather than studying in university?

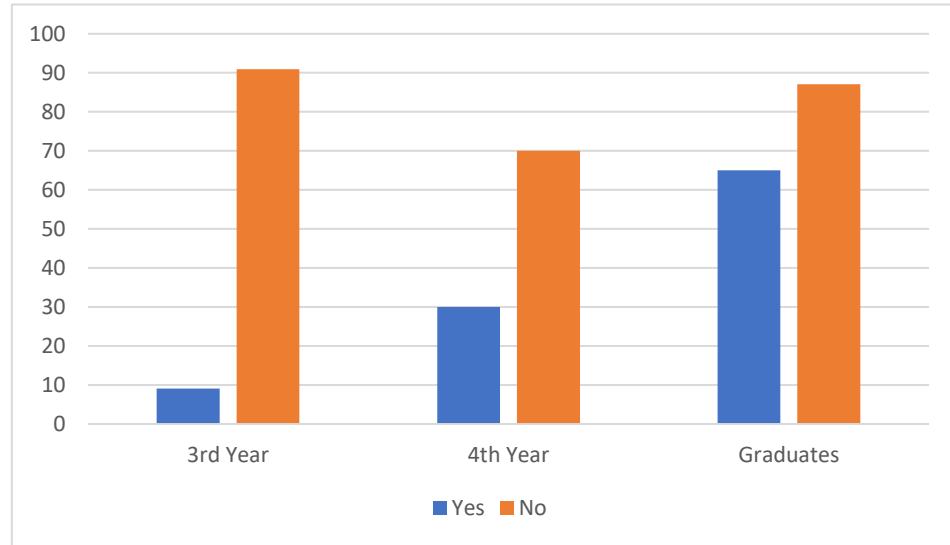


Figure 3.18: Bar chart, answer of the question ‘Do you think that, it would have been better to do some course rather than studying in university??’

From fig 3.17 and fig 3.18, 51.5% students from 3rd Year have completed some course from IT farm or somewhere else and 30% students graduates thinks that it would have been better to do some course rather than studying in university.

Again, 65.5% students from 4th Year have completed some course from IT farm or somewhere else and 30% students thinks that it would have been better to do some course rather than studying in university.

And, 65% students from Graduates have completed some course from IT farm or somewhere else and almost all the students thinks that it would have been better to do some course rather than studying in university.

3.4.1.3: Questions for BSC First Year

1. Do you know how to use Microsoft Office (Word, PowerPoint, Excel)?

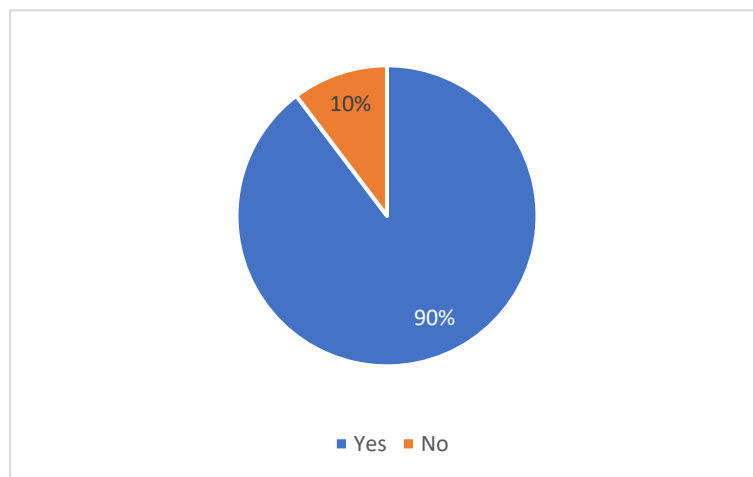


Figure 3.19: Bar chart, answer of the question 'Do you know how to use Microsoft Office (Word, Power Point, Excel)?'

2. How to save a file in Microsoft Word?

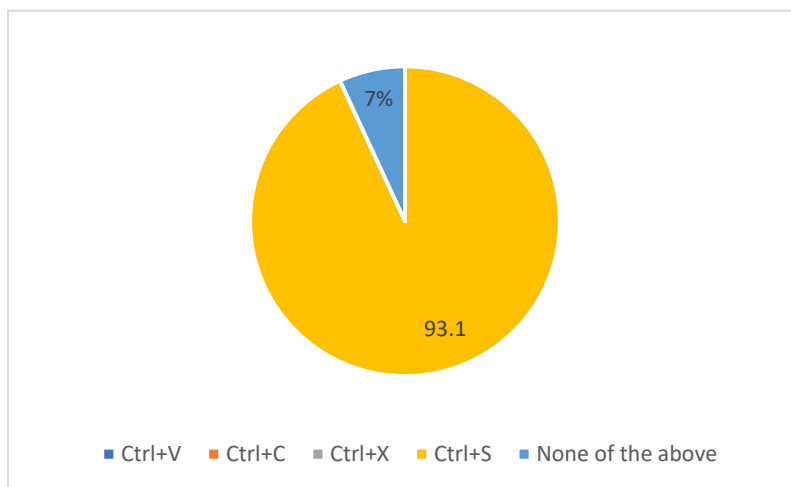


Figure 3.20: Bar chart, answer of the question 'How to save a file in Microsoft Word?'

3. Which of the following programming language has been taught in your class?

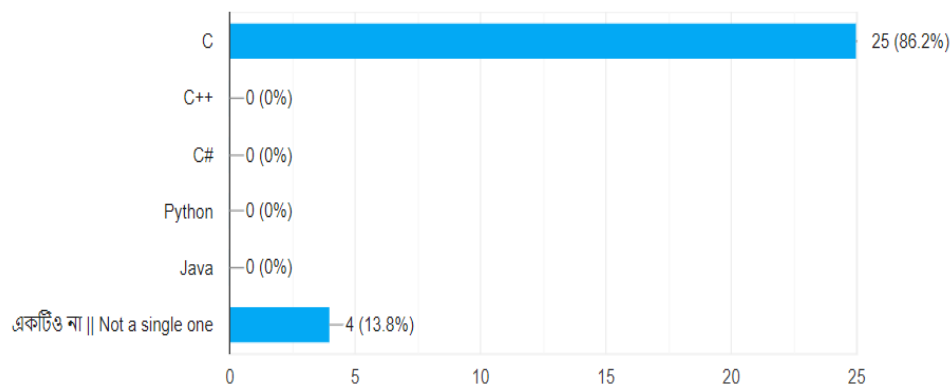


Figure 3.21: Bar chart, answer of the question ‘Which of the following programming language has been taught in your class?’

3.4.1.4 Questions For 4th Year

1. What do you want to do after graduation?

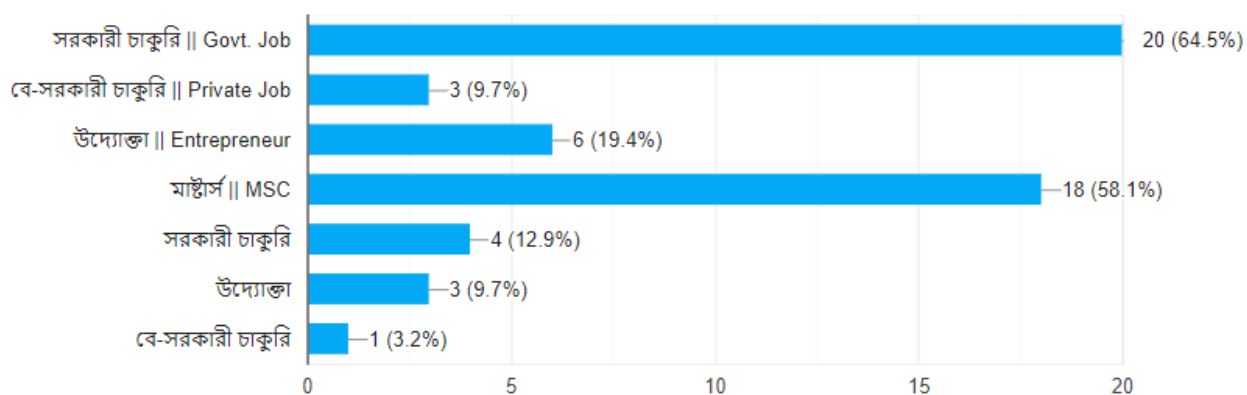


Figure 3.22: Bar chart, answer of the question ‘What do you want to do after graduation?’

3.4.1.5 Questions for Graduates

1. After your graduation, what are you doing right now?

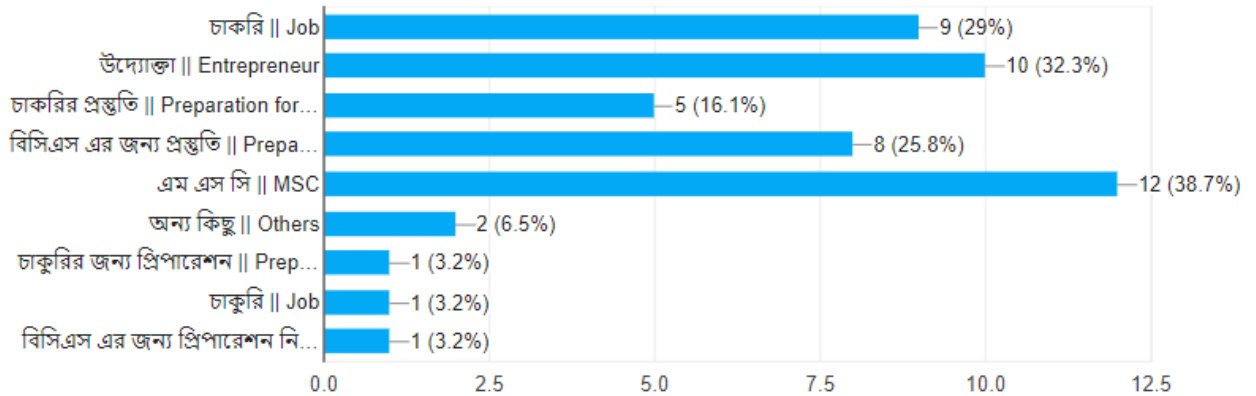


Figure 3.23: Bar chart, answer of the question ‘After your graduation, what are you doing right now?’

2. If you are a jobholder now, how long did it take to get this job?

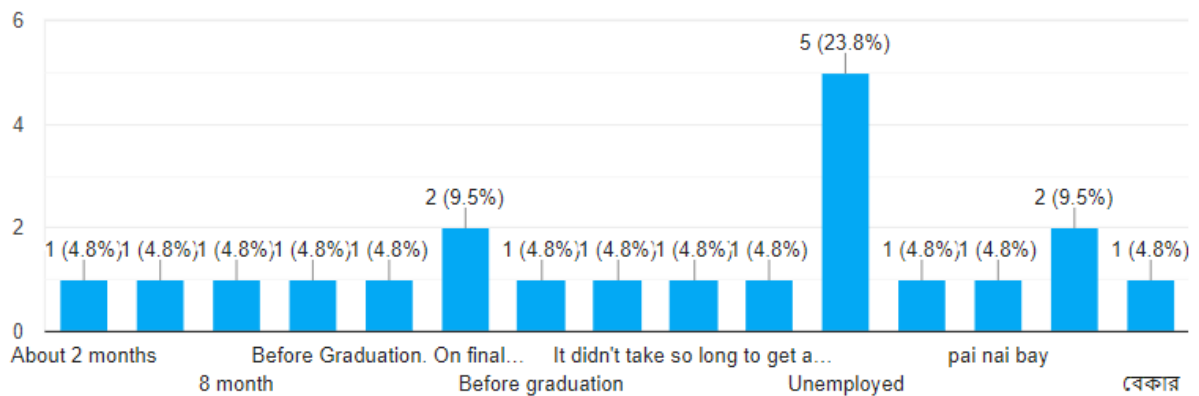


Figure 3.24: Bar chart, answer of the question ‘If you are a jobholder now, how long did it take to get this job?’

3.4.2 DIPLOMA

3.4.2.1 GENERAL QUESTIONS FOR DIPLOMA

1. Are you studying Computer Engineering intentionally?

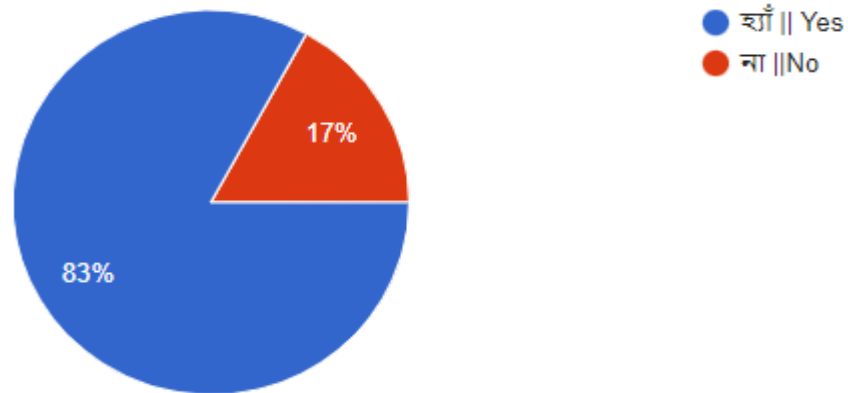


Figure 3.25: Pie chart, answer of the question 'Are you studying CE intentionally?'

2. Did you want to be a programmer before admitting Computer Engineering?

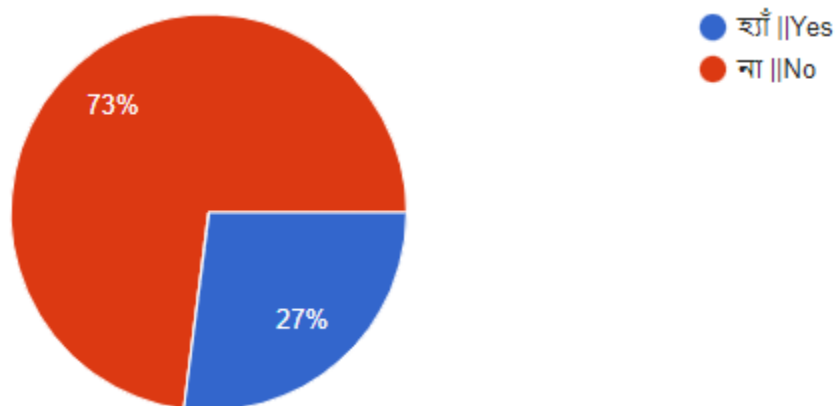


Figure 3.26: Pie chart, answer of the question 'Did you want to be a programmer before admitting CE?'

3. After admitting Computer Engineering, do you want to be a programmer?

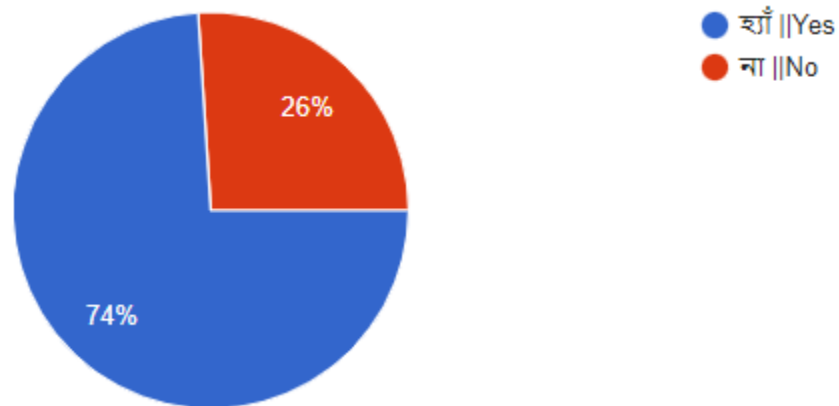


Figure 3.27: Pie chart, answer of the question 'After admitting CE, did/do you want to be a programmer?'

4. If not programmer, what do you want to be?

Businessman
Data telecommunication ey valo dhkkho hote cai
Networking Engineer
গ্রাফিক্স ডিজাইনার
নক টেক শিক্ষক
cinematographer
Civil

Figure 3.28: answer of the question 'If not programmer, what do you want to be?'

5. Which year are you studying right now?

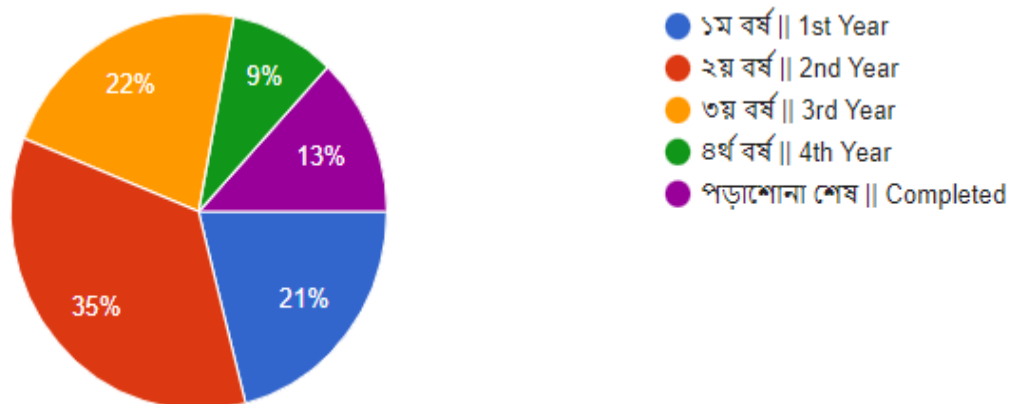


Figure 3.29: pie chart, answer of the question ‘Which year are you studying right now?’

3.4.2.2 Common Questions for All Years

1. Do you understand while reading an English book?

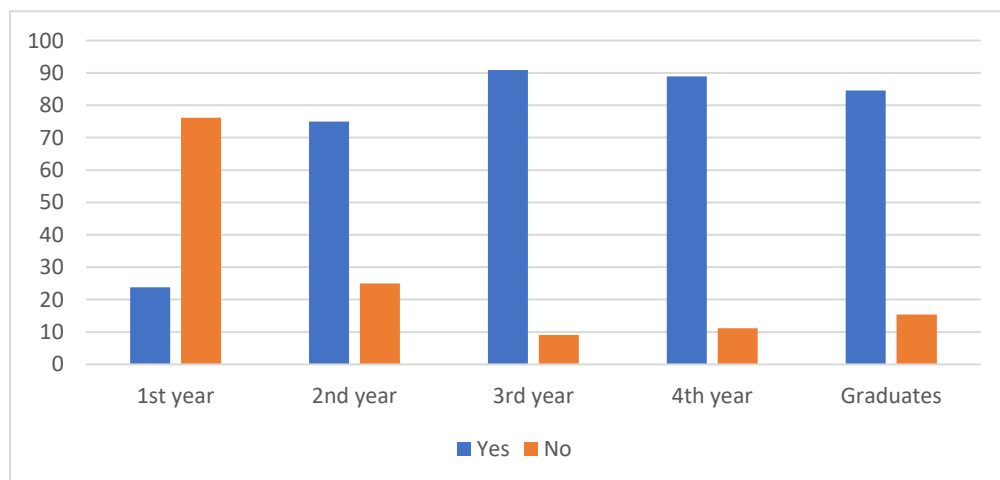


Figure 3.30: Bar chart, answer of the question ‘Do you understand while reading an English book?’

2. When you watching an English movie, do you need subtitle?

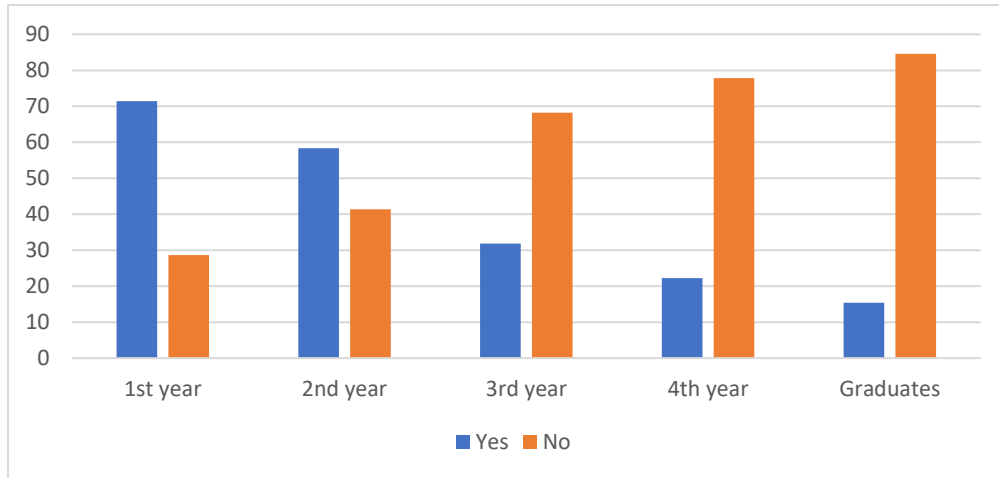


Figure 3.31: Bar chart, answer of the question ‘When you watching an English movie, do you need subtitle?’

3. Do your teachers give slide/class note in English?

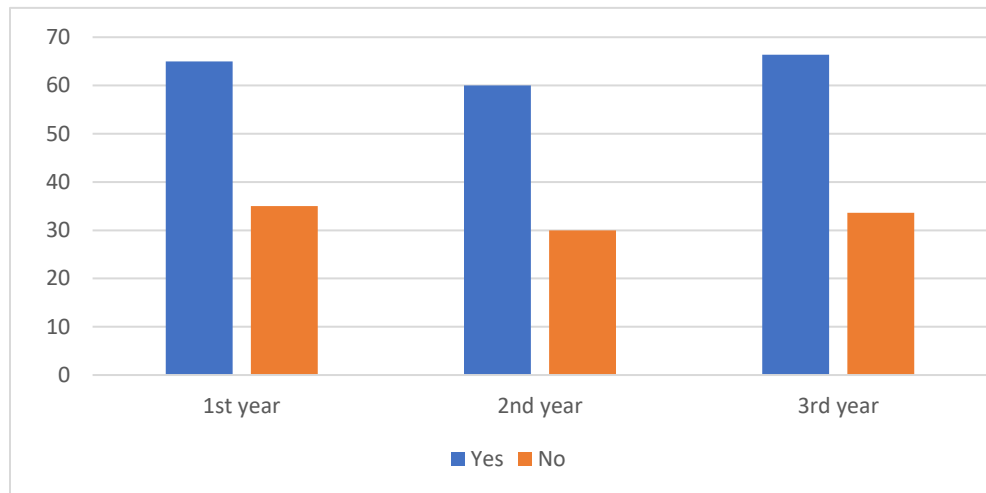


Figure 3.32: Bar chart, answer of the question ‘Do your teachers give slide/class note in English?’

Fig 3.32 says that more than 60% students from 1st Year, 2nd Year and 3rd Year told their teacher usually give note or slide in English in the class. But we can see from fig 3.31 says that ,71.4% students from 1st Year, 58% students from 2nd Year, 32% students from 3rd Year, 22% students from 4th Year and 16% students from graduates need subtitle while watching English movie. And fig 3.30 says that ,76.2% students from 1st Year, 25% students from 2nd Year 9.1 students from 3rd Year ,11.1% students from 4th Year and 15.4% students from graduates don’t understand while reading an English book.

4. Do you know how to use Microsoft Office (Word, PowerPoint, Excel)?

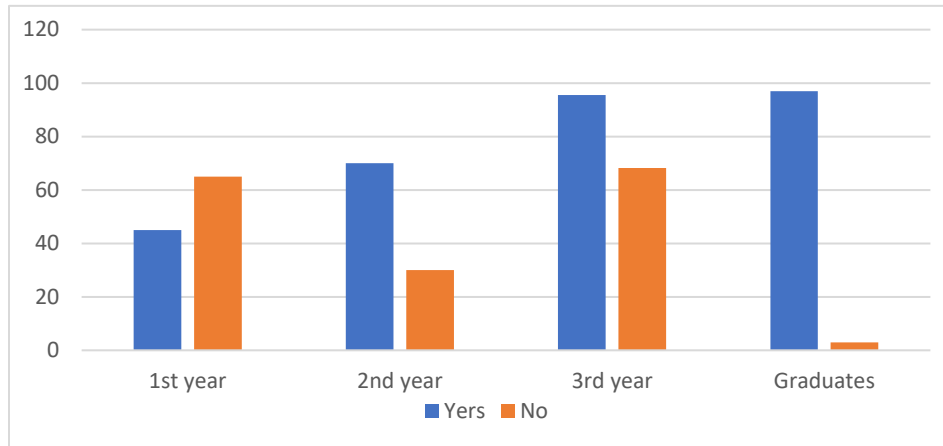


Figure 3.33: Bar chart, answer of the question 'Do you know how to use Microsoft Office (Word, PowerPoint, Excel)?'

5. How to save a file in Microsoft Word?

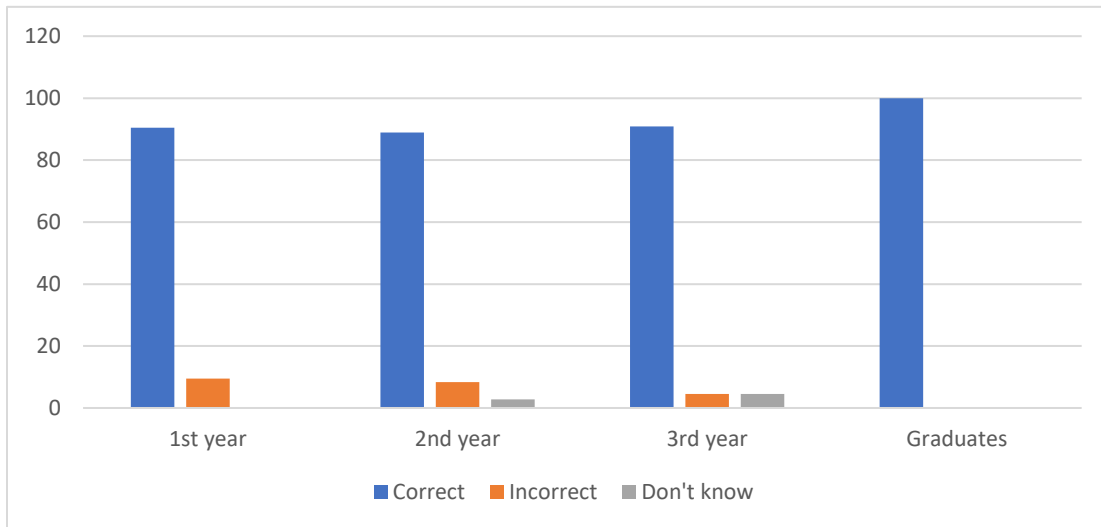


Figure 3.34: Bar chart, answer of the question 'How to save a file in Microsoft Word?'

6. Which of the following Programming language you know better?

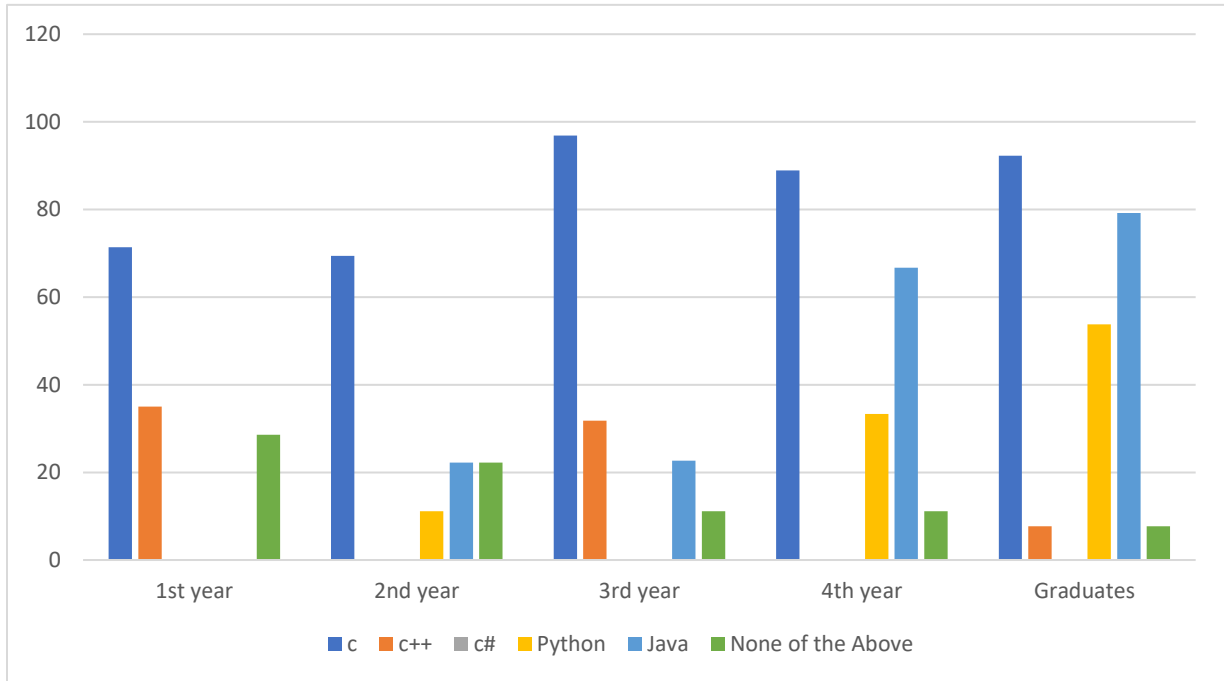


Figure 3.35: Bar chart, answer of the question ‘Which of the following Programming language you know better?’

7. Can you print “Hello World” using C language?

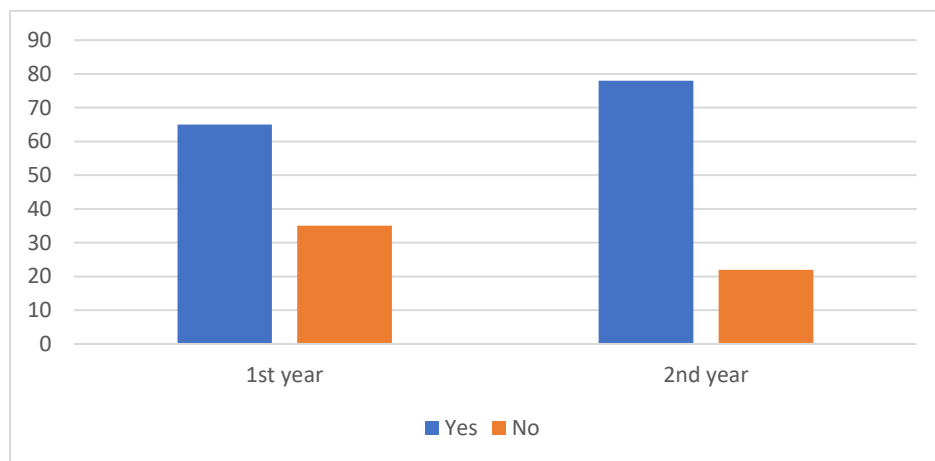


Figure 3.36: Bar chart, answer of the question ‘Can you print “Hello World” using C language?’

8. Did you participate in any programming competition?

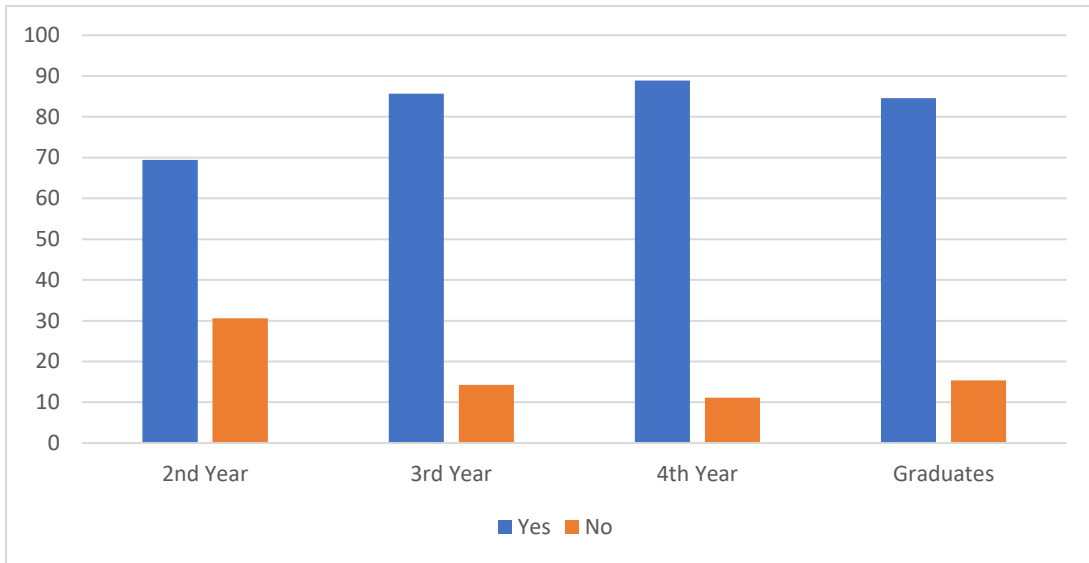


Figure 3.37: Bar chart, answer of the question “Did you participate in any programming competition?”

9. Can you make a WordPress Website?

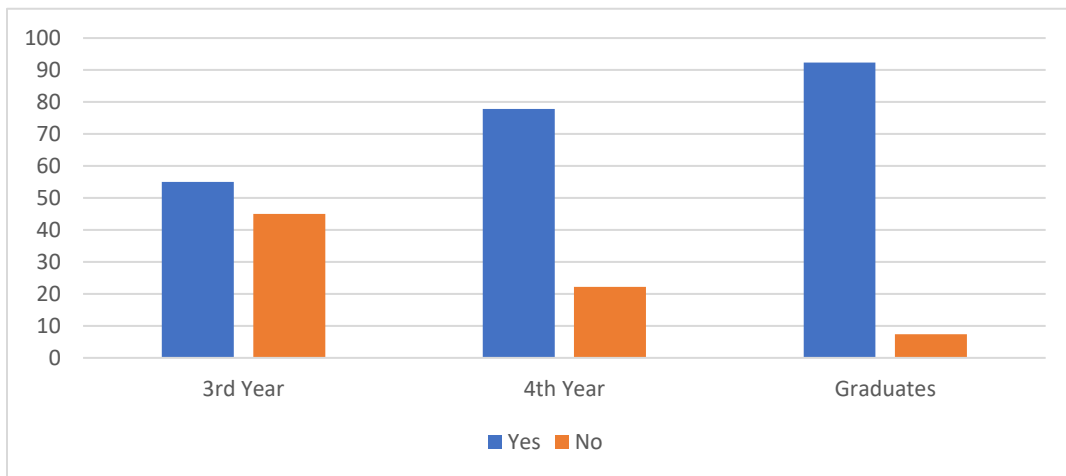


Figure 3.38: Bar chart, answer of the question “Can you make a WordPress Website?”

10. Have you completed any course from IT farm or anywhere else?

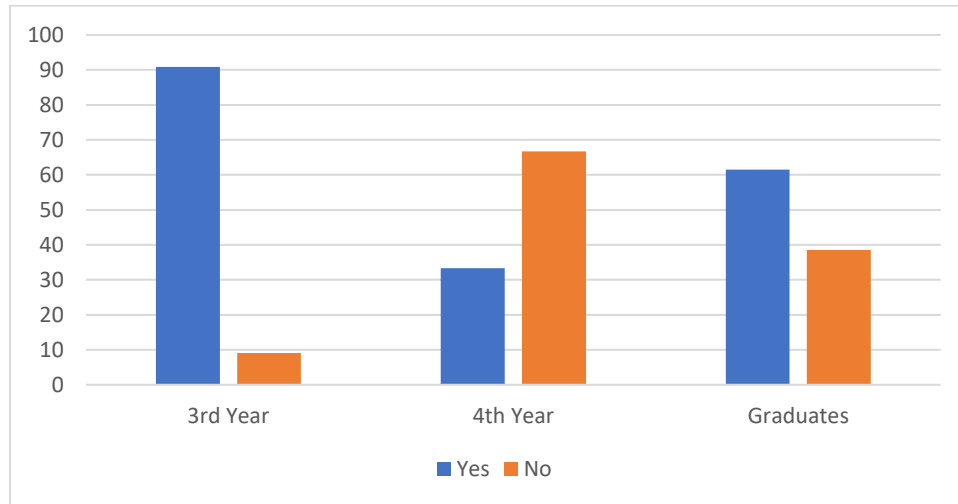


Figure 3.39: Bar chart, answer of the question “Have you completed any course from IT farm or anywhere else?”

11. Do you think that, it would have been better to do some course rather than studying in Institute?

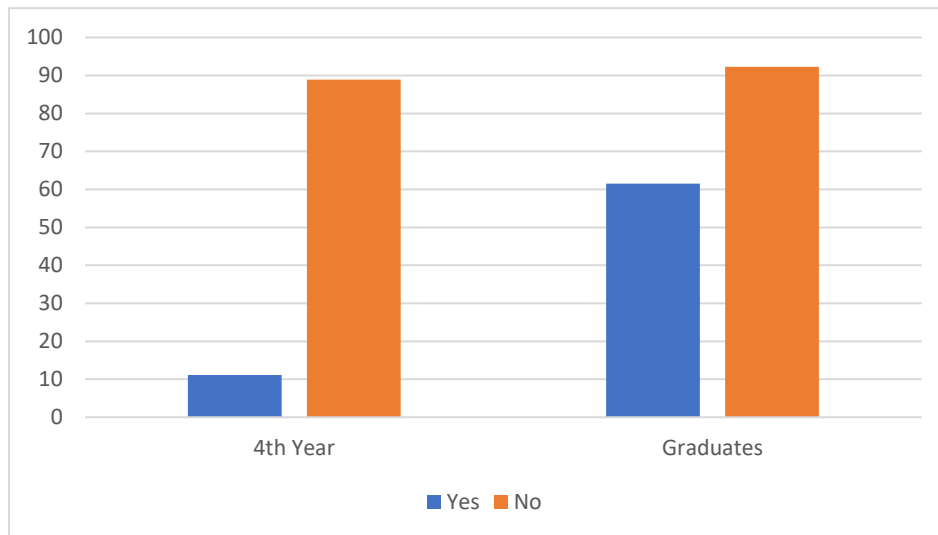


Figure 3.40: Bar chart, answer of the question “Do you think that, it would have been better to do some course rather than studying in Institute?”

From fig 3.38 and fig 3.39, 33.3% students from 4th Year have completed some course from IT farm or somewhere else and 11.1% students thinks that it would have been better to do some course rather than studying in university.

And, 61.5% students from Graduates have completed some course from IT farm or somewhere else and almost all the students thinks that it would have been better to do some course rather than studying in university.

3.4.2.3 Questions For 4th Year

1. What do you want to do after graduation?

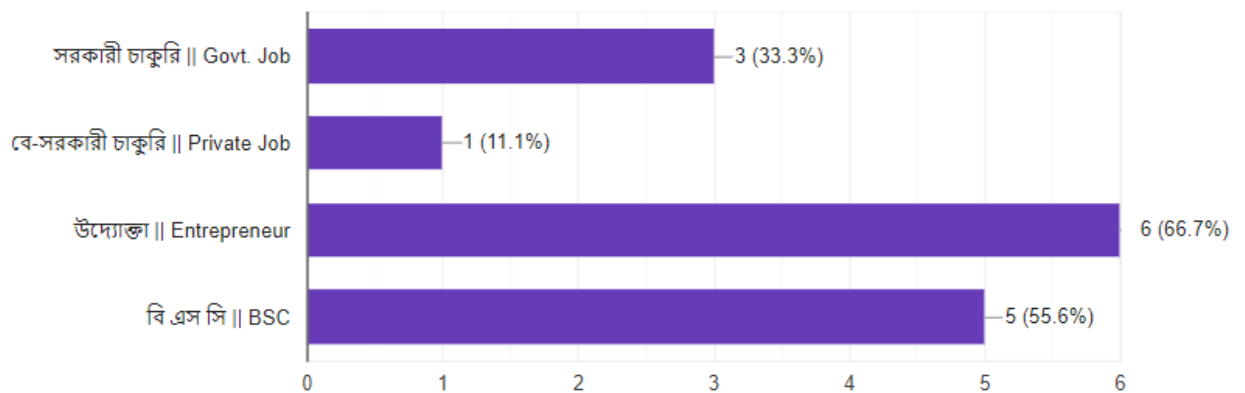


Figure 3.41: Bar chart, answer of the question ‘What do you want to do after graduation?’

3.4.2.4 Questions for Graduates

1. After Graduation, what are you doing now?

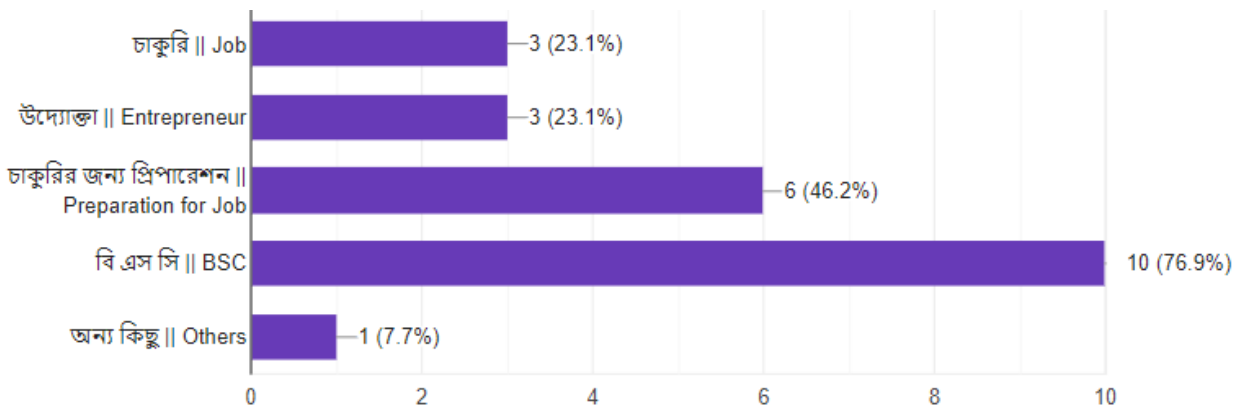


Figure 3.42: Bar chart, answer of the question ‘After Graduation, what are you doing now?’

2. If you got a job, how long did it take to get this job?

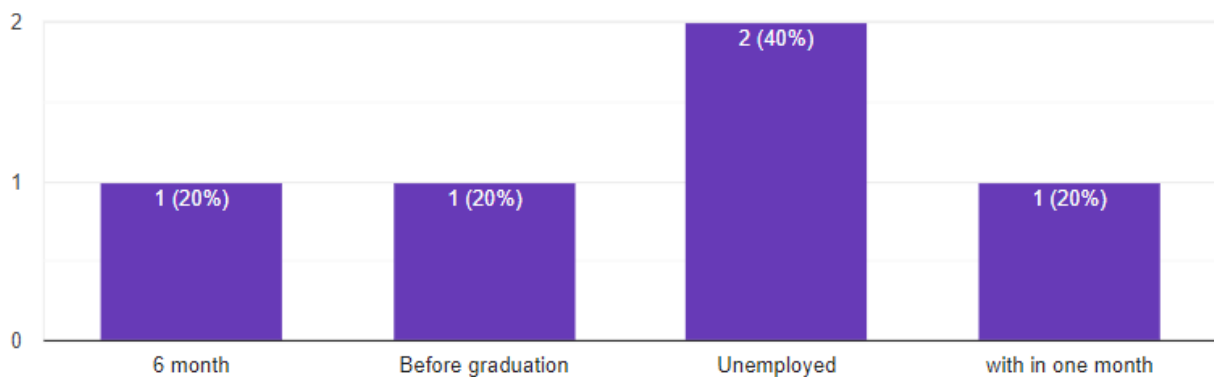


Figure 3.43: Bar chart, answer of the question ‘If you got a job, how long did it take to get this job?’

CHAPTER 4

COMPARISON AND DISCUSSION

4.1 BSC vs DIPLOMA

4.1.1 General Questions Comparison

We created different kinds of questions to compare University Students and Diploma students. Then we collected data from both students of University and Technical students based on those questions. Now, here we compare them.

From the general questions of BSC and Diploma,

Table 4.1: General Data Comparison

BSC	DIPLOMA
90%	83%
64.3%	27%
72%	74%

From Table 4.1, we can see that, the other 10% of BSC and 17% of DIPLOMA students don't admit intentionally. They admitted here for other reason. Like, Family or Social pressure, they just wanted to finish their study life etc.

Then, when we ask them if they wanted to be a programmer before admitting BSC or Diploma. IN BSC, almost 36% students didn't want to be a programmer before admitting but after admitting, this rate decreases to 28%. On the other hand, IN Diploma, 27% students wanted to be programmer before admitting but this rate is increased to 72% after admitting.

Now, we can tell that,

1. Those who doesn't want to be a programmer, didn't admitted intentionally.
2. Those who didn't admit intentionally and doesn't want to be programmer, just wants to finish their study.

4.1.2 1st Year Comparison

Table 4.2: 1st Year Comparison

Questions	BSC	DIPLOMA
How many students know to save a file in Microsoft Word?	93.1%	90.5%
How many students understand while reading an English book?	48.3%	23.8%
How many students don't need subtitle while watching a movie?	6%	28.6%
How many students can print "Hello World" using C language?	93%	65%

From table 4.2, 48.3% of BSC students and 23.8% can understand while reading an English book .6% of BSC students and 28.6% of Diploma students don't need any subtitle to watch an English movie.

So, we can tell,

Those who understands English book and doesn't need any subtitle to watch an English movie can understand English by reading and listening.

Students are good at,

Table 4.3: 1st Year Language Comparison

Language Name	BSC	DIPLOMA
C	69%	71.4%
C++		35%
JAVA		--
Python		--
None Of Them	31%	28.6%

4.1.3 2nd Year Comparison

Table 4.4: 2nd Year Comparison

Questions	BSC	DIPLOMA
How many students participate in any programming contest?	94.7%	90.5%
How many students understand while reading an English book?	78.9%	75%
How many students don't need subtitle while watching a movie?	31.6%	41.4%
How many students can print "Hello World" using C language?	94.7%	78%

Table 4.5: 2nd Year Language Comparison

Language Name	BSC	DIPLOMA
C	89%	69.4%
C++		--
JAVA	47%	22.2%
Python		11.1%
None Of Them	3%	22.2%

4.1.4 3rd Year Comparison

Table 4.6: 3rd Year Comparison

Questions	BSC	DIPLOMA
How many students participate in any programming contest?	96.9%	85.7%
How many students understand while reading an English book?	93.9%	90.9%
How many students don't need subtitle while watching a movie?	12.1%	68.2%
How many students can make a WordPress website?	77.4%	55%
How many students have completed any course from IT farm or anywhere else?	51.5%	90.9%
How many students think that it would have been better to do some course rather than studying in Institute?	9.1%	61.5%

Table 4.7: 3rd Year Language Comparison

Language Name	BSC	DIPLOMA
C	84%	96.9%
C++	--	31.8%
JAVA	71%	22.7%
Python	6%	--
None Of Them	9%	11.1%

4.1.5 4th Year Comparison

Table 4.8: 4th Year Comparison

Questions	BSC	DIPLOMA
How many students participate in any programming contest?	87.1%	88.9%
How many students understand while reading an English book?	83.9%	88.9%
How many students don't need subtitle while watching a movie?	35.5%	77.8%
How many students can make a WordPress website?	96.8%	77.8%
How many students have completed any course from IT farm or anywhere else?	64.5%	33.3%
How many students think that it would have been better to do some course rather than studying in Institute?	30%	11.1%

Table 4.9: 4th Year Language Comparison

Language Name	BSC	DIPLOMA
C	87%	88.9%
C++	--	--
JAVA	65%	66.7%
Python	41%	33.3%
None Of Them	13%	11.1%

Table 4.10: 4th Year Extra skill Comparison

Course Name	BSC	DIPLOMA
Web Design	68.8%	56.5%
PHP	29%	
Laravel	12.9%	
Graphics Design		56%
None Of the Above	16%	0%

Table 4.11: 4th Year After Graduation Plan Comparison

Title	BSC	DIPLOMA
Govt Job	77.4%	33.3%
Private Job	12.9%	11.1%
Entrepreneur	29.1%	66.7%
BSC/MSC	58.1	55.6%

4.1.6 Graduates Comparison

Table 4.12: Graduates Comparison

Questions	BSC	DIPLOMA
How many students participate in any programming contest?	87%	84.6%
How many students understand while reading an English book?	100%	84.6%
How many students don't need subtitle while watching a movie?	12.9%	84.6%
How many students can make a WordPress website?	93.5%	92.3%
How many students have completed any course from IT farm or anywhere else?	65%	61.5%
How many students think that it would not have been better to do some course rather than studying in Institute?	87.1%	92.3%

Table 4.13: Graduates Language Comparison

Language Name	BSC	DIPLOMA
C	93%	92.3%
C++	12%	7.7%
JAVA	64%	79.2%
Python	48%	53.8%
None Of Them	3%	7.7%

Table 4.14: Graduates Extra skill Comparison

Course Name	BSC	DIPLOMA
HTML	96.8%	84.6%
CSS	93.5%	84.6%
JAVA Script	93.5%	84.6%
PHP	32.3%	46.2%
Laravel	19.4%	0
Graphics Design	--	46.2%
None Of the Above	0	7.7%

Table 4.15: After Graduation Plan Comparison

Title	BSC	DIPLOMA
Job(ongoing)	32.2%	23.1%
Job(preparation)	19.3%	46.2%
Entrepreneur	32.3%	23.1%
BCS Preparation	38.7%	
BSC/MSc	58.1	76.9%

CHAPTER 5

5.1 Conclusion

Bangladesh is one of the most densely populated countries in the world. The literacy rate is also increasing than before. But a lot of literate people is remained unemployed. Many reasons behind it. We know corruption is reason behind it. But it is not the only reason. It possible that, students didn't study properly when they need to do. So that, they haven't enough skill to get a job. Some of them have skill but lack of some effective knowledge like, English communication skill, Problem solving skill etc. And skill is one of the main things that matters in ICT sector. This paper has shown the gradual development of CSE and Diploma students.

5.2 Future work

We wanted to show, how much BSC and DIPLOMA students gathered skill from the time of their university or institute life. But we all know these kinds of work needs thousands and thousands more data to show a good result. We couldn't collect that kind of data because of COVID-19 situation. In future, we will collect data more and not from only one university. We will go university to university to collect data and visualize them like we did in this work. And if possible, we will do the work physically.

5.3 Limitations

We tried our best to show the gradual development of CSE and DIPLOMA students. But the number of our collected data was not enough to show that.

APPENDIX

Appendix A: Data collected from Survey.

We faced numerous challenges while conducting the analysis, the first of which was Collected data from students through online. We request them to fill up our data form again and again. But very few were fill up the form. Hats why we couldn't collect data enough to show the best result. After all we tried to show a good result. In the future we will try to collect more and more data to show the best result

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DETERMINING THE SKILL OF CSE STUDENTS OF UNIVERSITY AND STUDENTS OF TECHNICAL INSTITUTE IN BANGLADESH

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