WORKING PROCEDURE OF BASIC NETWORKING AND SOFTWARE DEVELOPMENT

BY

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

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APPROVAL

This Intern titled " **BASIC NETWORKING AND SOFTWARE DEVELOPMENT AND WORKING PROCEDURE**" presented by **Md. Golam kibriya, ID No: 162-15-7978** 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 (BSc) and approved as to its style and contents. The presentation has been held on September 2019.

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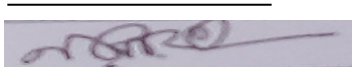
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DECLARATION

I hereby declare that, the work submitted in this internship report is done by me under the supervision of **NARYAN RAJAN CHAKRABORTY, Assistant Professor of Department of Computer Science and Engineering**, Daffodil International University, in partial fulfillment of the requirements for the degree of Bachelor of Science in Computer Science and Engineering. I am declaring this report is my original work. I ensure that neither this report nor any part has been presented elsewhere for the award of any degree.

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I am grateful Daffodil Online Limited for giving me a chance to do internship under its BASIC NETWORKING AND SOFTWARE DEVELOPMENT AND WORKING PROCEDURE. A lot of wonderful person helped me during the time of writing the report by providing data, and information, procedure as well as the management process when required, and made me understand different concept clearly.

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Finally, I would like to thank my family especially my parents for their persevering supports and encouragements throughout the whole period of this internship.

ABSTRACT

This internship report is for completion of my B.Sc. at Daffodil International university. For this I had an internship over "BASIC NETWORKING AND SOFTWARE DEVELOPMENT AND WORKING PROCEDURE" at reputed organization named Arista IT Service . There I had my responsibilities data connection, rules & regulation, network controlling and software development. The first part of internship report gives an overview about of Arsita IT Service Ltd . it is giving Service the Domain & Hosting, software implementation , internet net service provider Then discusses about the performed tasks and responsibilities internship, finding problems during about the performed tasks and responsibilities during internship, finding problem during maintaining the system and way of solving them. Artista IT service Ltd is largest computer it service center & software company. The report discussed about purpose of the Create LAN Network, Connecting Computer in Networking or share the resources, choosing software, Software implementation, Run Successful Software Project .

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CHAPTER 01

INTRODUCTION

1.1 Introduction

This project named is "BASIC NETWORKING AND SOFTWARE DEVELOPMENT ". Bangladesh is improvement country of Technology. Software and Internet is the most important of worldwide world And it is become very essential part our day by day life. Now a day's not only big association but also internet and SOFTWARE has been using little organization and its demand is increasing day by day. As a result secure, reliable and appropriate Data store of network turns into an essential issue. Today every organization need to networking and software.

1.2 Motivation

Networking and software implementation are development profit my internship or profession exploration. It is an opportunity to collect information about the skills necessary to succeed in the different types of jobs, career, and industries of the general population you meet. This can help me to clear up my career interests and next stages. Day by day the whole world was becoming depended upon computer system. Networking software implementation are a major part of information technology now a day's market increase demand. I am currently pursuing my Bachelors in Computer Science and Engineer at Daffodil International University, I understand the significance of increasing practical knowledge which will supplement the course book learning and help a student gain a wider perspective of the subjects. During the internship I have discovered that I am perfectly skilled in the details of Networking and software development.

I am very interested in Computer network &software development and want to build up my career as It Engineer. It demand in first world is too high and it is become in first and it is become a prior subject in our country also. Without strong Computer network &software development system vision of making "Digital Bangladesh" is not possible

1.3 Internship Objectives

Main objective of my internship program is to understand the current conditions of job market and also to prepare myself as a skilled person in the competitive job market. Internship is very essential for skill development. To achieve some special quality and real life job experience in order to prove myself as a skilled one internship is the only way .It have a largely effect on our it sector, we will able to use Internet, Software export, call center, E-Commerce, Tele –Education, video Conferencing more vastly. By identifying these factors we can be sure about the revolutionary change over our IT sector, during our work in Arista IT Service we achieved various experiences.

1.4 Introduction of Company

Arista IT Service Ltd. mostly known as Arista it provide software, business solution and networking solutions .Since it is established in 2017. It use skills in programming, technology and business management to look deep into the issues and come up with innovative solutions Arista IT connect with worldwide many brunches for continuous and better service to its clients.

Name	Arista IT Service Ltd.
Location	58/10/A, Barek Mansion-3, Oxford. 42 Free School Street, Panthapath, Dhaka-1205, Bangladesh
Telephone	88 01958442501
Website	www.aristaitservice.com
E-mail	support@aristaitservi.com
Model of association	Software solution &Internet Service Provider

1.5 Report Layout

In the chapter (1) I have described about the aim of the internship, Motivation and introduction to the marketplace.

In the chapter (2) I have described about the introduction of organization, production and market, target, swot analysis and organization structure.

In the chapter (3) I have described about the daily task and activities, events and challenges.

In the chapter (4) I really have described is Competencies Earned, Smart Plan, Reflections.

In the chapter (5) I have described Conclusion and Future Scope.

CHAPTER 02

ORGANIZATION

2.1 Introduction

Arista IT Servic is most popular it company in bangladesh.it have one it training center .this is name bd it training center. Arista IT Servic started its journey in 2017 an now is a software, business solution and networking solutions. The foundation worked with numerous national projects and international associations with high thankfulness from all concerned. It utilizing the most recent technologies and updating the service wherever it is required [2].

2.2 Production and Market Situation

Arista IT Service Ltd comprises of diversified business with several different sister concern organizations in Canada, Malaysia, UK, India, China, Dubai and Hong Kong. I ensure Arista IT Service Ltd is the most vital of IT sector for market situation and they benefit high quality of other IT division. In Bangladesh Arista IT Service Ltd sister concerns- AristaExport.com- It is Global online Export Import Platform as like Alibaba.com. Arista IT Service Ltd also gives stand-out IT Services and Professional Training services [2].

IT Services

- Corporate Internet Solution
- Security Solution
- Data center
- Web hosting

- Professional course trainings
- Data Connectivity

Professional Training Services

- Cisco Certified Network Associate (CCNA)
- Cisco Certified Network Professional (CCNP)
- ISP setup and leading using Linux
- Project Management Professional (PMP)
- MS SQL Server
- MS Windows Server
- Oracle Database 12c: New Features for Administrators
- Oracle Application Express (APEX)
- Certified Information Security Manager (CISM)
- Professional Software Testing and Project Management
- Game Design and Development
- Oracle Forms Developer Certified Professional Course
- Android Application Development Course

2.3 Target Group

The business' supporter base incorporates all buyers and all little to medium-sized offices, comprising of new companies. The association plans to focus on indicate clients, as those are ideal target for our new high-speed contributions, and keep up the best development capacity for the organization. Web Solutions feels that those commercial center portions have extraordinary evaluating and carrier needs, and make more dedicated, reliable customers.

2.4 SWOT Analysis

Strengths

- Customer service /Support
- Flexibility
- Doman
- Software Service
- Good information technology planning process

Weakness

- Large amount of money necessary to set up businesses

Opportunities

- Age form of the population alternative
- Edition of regulatory case

Threats

- It remains to be seen how far consumers can be induced to hug Internet access

2.5 Organizational Structure

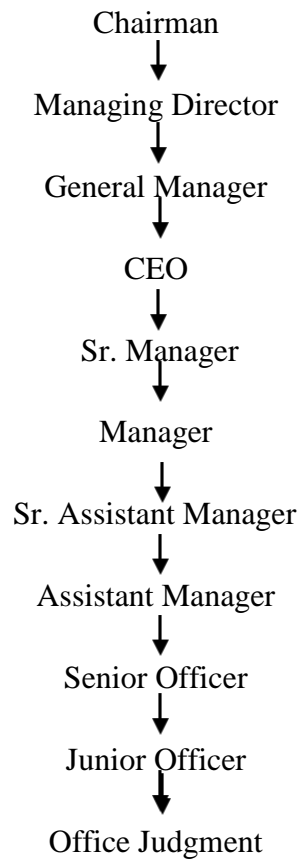Arista IT Service Ltd Organization Form

Chairman
↓
Managing Director
↓
General Manager
↓
CEO
↓
Sr. Manager
↓
Manager
↓
Sr. Assistant Manager
↓
Assistant Manager
↓
Senior Officer
↓
Junior Officer
↓
Office Judgment

Figure 2.1 Organizational Structure of Arista IT Service Ltd.

CHAPTER 03

TASKS, PROJECT AND ACTIVITIES

3.1 Daily Task and Activities

In an IT area, skilled and experienced are the most vital issues to give quality Service. Arista IT Service Ltd. maintains a system. As an intern, I have constantly tried to give proper services to Arista IT Service Ltd are network and software. During the internship, my duty was Connecting Computer in Networking and software implementation.

Mastery gathering Month - 1 In the first month of internship on Arista IT Service Ltd. I have learned and performed the following tasks:

- Basic Networking
- OSI Model
- TCP/IP
- About Of Topology
- IPv4 Addressing
- IP Addressing & Sub netting
- Class C Sub netting
- Class B Sub netting
- Variable Length Subnet Mask
- Static Routing

Month - 2 In the second month of internship on Arista IT Service Ltd. I have learned
and performed the following tasks:

- Dynamic Routing
- Switching Basic Concept & VLAN Configuration
- Create LAN Network
- Connecting Computer in Networking or share the resources

- Introduction to Oracle Project
- Oracle 11g SQL Commands

- Month – 3 The last month of internship on daffodil online limited I have learned and performed the following tasks:

  - Oracle 11g PL/ SQL Commands

  - Software implementation

  - Create admin panel

  - Project roles

- Month – 4 The last month of internship on daffodil online limited I have learned and performed the following tasks:

  - Create Software Work Plans

  - Updating work plans

  - Run Successful Software project

  - Software Data backup

3.2 Event and Activities

3.2.1 Existing System

Networking Team is handling to the resources and data share.

Software team is creating software .This software helpful the every organization.

3.2.2 Benefit for customer

In present, our technology is going door to door. This project is going to solve current existing issue.

1. Communication
2. Sharing
3. Clients Services
4. Security of data
5. Full reactive

3.2.3 Scope of Work

In the present Connecting Computer in Networking & software, have more opportunity of work, for example, Bank, insurance, IT farm thus more. The present IT world system Connecting Computer in Network and software essential part in all organizations/association.

3.3 Project task and activities

Software team is creating all different software programs on a computer, such as applications and the operating system. Software are programs that are designed to perform a specific operation... Firmware usually refers to a piece of software that directly controls a piece of hardware and networking.

3.3.1 Basic Networking Components:

Internet: The Internet is a global system of interconnected computer networks that use the standard internet Protocol suit(TCP/IP) to serve billions of users worldwide.

Network: A network consists of two or more computers connected together and they can communicate and share resources.

Types of networks: Depending on one"s perspective, there are classify networks in different ways

- Based on **Transmission media** : wired(Coaxial cable, fiber-optic cable and wireless).
- Based on **Network size**: LAN, MAN and WAN.
- Based on **Management Method:** Peer-to-Peer and client/server.
- Based on **Topology** : Bus, star, Ring etc

3.3.2 OSI Model

OSI stands for **Open Systems Interconnection**. It has been developed by ISO – „**International Organization of Standardization**„„in the year 1974. It is a 7 layer architecture with each layer having specific functionality to perform. All these 7 layers work collaboratively to transmit the

data from one person to another across the globe. The following shows the seven layers Open Systems Interconnection (OSI) mod
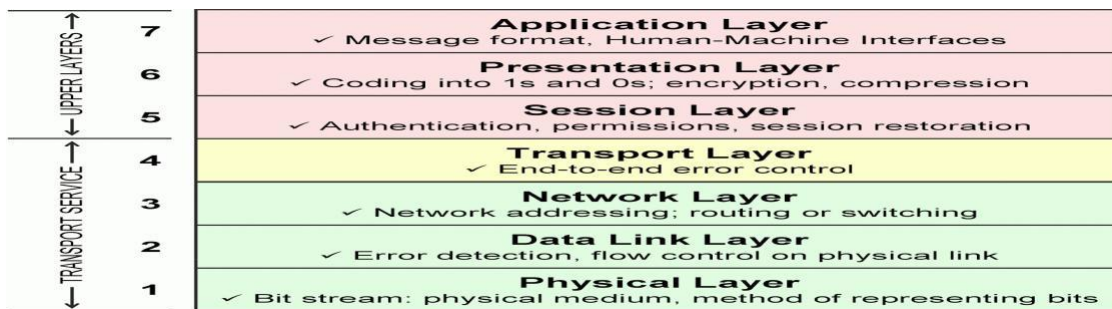

Figure 3.5 OSI Model

3.3.3: TCP/IP

TCP/IP stands for Transmission Control Protocol/Internet Protocol, which is a set of networking protocols that allows two or more computers to communicate. The Defense Data Network, part of the Department of Defense, developed TCP/IP, and it has been widely adopted as a networking standard.

The TCP/IP model is a condensed version of the OSI reference model consisting of the following 4 layers:
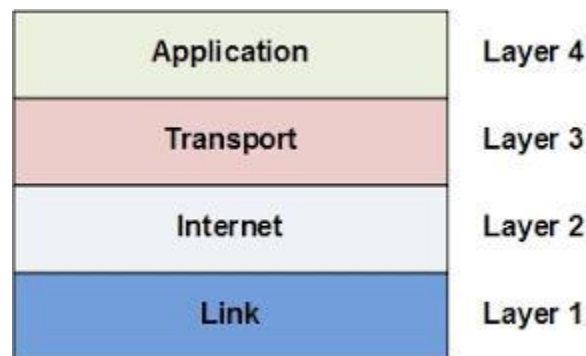

Figure 3.2: TCP/IP

3.3.4 IP Addressing & Subnetting :

IP Addressing: An IP address, short for Internet Protocol address, is an identifying number for network hardware connected to a network. Having an IP address allows a device to communicate with other devices over an IP-based network like the internet. An IP address is two types one of them is IPv4 and another of them is IPv6.IPv4 that"s mean Internet Protocol Version four .IPv4 contains

4 octets or portions. Each octet contains 8 bits and separated by a single dot (.) So it has 32 bit. There are two main parts of IP address which is Network & Host part .IPv6 that"s mean Internet Protocol Version Six.IPv6 contains 8 octets or portions. Each octet contains 16 bit .So it has 128 bits. IP addresses are five classes class A, class B, class C, class D, and class E.

Subnet Mask: An IPv4 address has two components, the network part and the host part. Really, IPv4 address is a combination of IPv4 address and Subnet mask and the purpose of subnet mask is to identify which part of an IPv4 address is the network part and which part is the host part. Subnet mask is also a 32 bit number where all the bits of the network part are represented as "1" and all the bits of the host part are represented as "0".

Network Address: A network address is used to identify the subnet that a host may be placed on and is used to represent that network. We can find the network address by assigning all bits in the host part as 0.

Directed Broadcast: The host id value containing all 1's in the bit pattern indicates a directed broadcast address. A directed broadcast address can occur in the destination IPv4 address of an IP datagram, but never as a source IPv4 address. A directed broadcast address will be seen by all nodes on that network. For example, the broadcast id for the network 192.168.10.0 will be 192.168.10.255.

A directed broadcast is sent to a specific network identified in the Network part of the IPv4 address. Routers on the network configured to forward-directed broadcasts will send the IP datagram to the final router that connects the destination specidied in the network part, and the router at the destination network should forward it to the destination host.

Table: IP address classes

Class	1st Octet Decimal Range	1st Octet High Order Bits	Network/Host ID	Default Subnet Mask	Number of Networks	Host per Network (Usable Address)
A	1-126	0	N.H.H.H	255.0.0.0	126	16,777,214
B	128-191	10	N.N.H.H	255.252.0.0	16,382	65,534
C	192-223	110	N.N.N.H	255.255.255.0	2,097,150	254
D	224-239	1110	Preserved for Multitasking	Preserved for Multitasking	Preserved for Multitasking	Preserved for multitasking
E	240-254	1111	Empirical; Used for Assay	Empirical; Used for Assay	Empirical; Used for Assay	Empirical Used for Assay

Private IP Address

A private IP address is an ip address that"s conserved for interior use backward a router or various NAT devices. The IANA reserve the IP addresses barrier for use which as private IP address.

Table: Private IP Address

Class	Private Networks	Subnet Mask	Range
A	10.0.0.0	255.0.0.0	10.0.0.0-10.255.255.255.
B	172.16.0.0-172.31.0.0	255.240.0.0	172.16.0.0-172.31.255.255
C	192.168.0.0	255.255.0.0	192.168.0.0-192.168.255.255

3.3.5. IPv4 & IPv6 Addressing:

IPv4 Addressing: IPv4 stands for Internet Protocol version 4. It is the underlying technology that makes it possible for us to connect our devices to the web. Whenever a device access the Internet (whether it's a PC, Mac, smartphone or other device), it is assigned a unique, numerical IP address such as 99.48.227.227. To send data from one computer to another through the web, a data packet must be transferred across the network containing the IP addresses of both devices. Without IP addresses, computers would not be able to communicate and send data to each other. It's essential to the infrastructure of the web.

IPv6 Addressing: IPv6 is the sixth revision to the Internet Protocol and the successor to IPv4. t functions similarly to IPv4 in that it provides the unique, numerical IP addresses necessary for Internet-enabled devices to communicate. However, it does sport one major difference: it utilizes 128-bit addresses.

3.3.6 Class A Subnetting :

In Class A, only the first octet is used as Network identifier and rest of three octets are used to be assigned to Hosts (i.e. 16777214 Hosts per Network). To make more subnet in Class A, bits from Host part are borrowed and the subnet mask is changed accordingly.

For example, if one MSB (Most Significant Bit) is borrowed from host bits of second octet and added to Network address, it creates two Subnets (2^1=2) with (2^{23}-2) 8388606 Hosts per Subnet.

The Subnet mask is changed accordingly to reflect subnetting. Given below is a list of all possible combination of Class A subnets:

Table: **Class A Subnetting**

Network Bits	Subnet Mask	Bits Borrowed	Subnets	Hosts/Subnet
8	255.0.0.0	0	1	16777214
9	255.128.0.0	1	2	8388606
10	255.192.0.0	2	4	4194302
11	255.224.0.0	3	8	2097150
12	255.240.0.0	4	16	1048574
13	255.248.0.0	5	32	524286
14	255.252.0.0	6	64	262142
15	255.254.0.0	7	128	131070
16	255.255.0.0	8	256	65534
17	255.255.128.0	9	512	32766
18	255.255.192.0	10	1024	16382
19	255.255.224.0	11	2048	8190
20	255.255.240.0	12	4096	4094
21	255.255.248.0	13	8192	2046
22	255.255.252.0	14	16384	1022
23	255.255.254.0	15	32768	510
24	255.255.255.0	16	65536	254
25	255.255.255.128	17	131072	126
26	255.255.255.192	18	262144	62
27	255.255.255.224	19	524288	30
28	255.255.255.240	20	1048576	14
29	255.255.255.248	21	2097152	6
30	255.255.255.252	22	4194304	2

3.3.7 Class B Subnetting

By default, using Classful Networking, 14 bits are used as Network bits providing (2^{14}) 16384 Networks and $(2^{16}-2)$ 65534 Hosts. Class B IP Addresses can be subnetted the same way as Class A addresses, by borrowing bits from Host bits. Below is given all possible combination of Class B subnetting:

Table: Class B Sub netting

Network Bits	Subnet Mask	Bits Borrowed	Subnets	Hosts/Subnet
16	255.255.0.0	0	0	65534
17	255.255.128.0	1	2	32766
18	255.255.192.0	2	4	16382
19	255.255.224.0	3	8	8190
20	255.255.240.0	4	16	4094
21	255.255.248.0	5	32	2046
22	255.255.252.0	6	64	1022
23	255.255.254.0	7	128	510
24	255.255.255.0	8	256	254
25	255.255.255.128	9	512	126
26	255.255.255.192	10	1024	62
27	255.255.255.224	11	2048	30
28	255.255.255.240	12	4096	14
29	255.255.255.248	13	8192	6
30	255.255.255.252	14	16384	2

3.3.8 Class C Sub netting :

Class C IP addresses are normally assigned to a very small size network because it can only have 254 hosts in a network. Given below is a list of all possible combination of subnetted Class B IP address:

Table : Class C Subnetting

Network Bits	Subnet Mask	Bits Borrowed	Subnets	Hosts/Subnet
24	255.255.255.0	0	1	254
25	255.255.255.128	1	2	126
26	255.255.255.192	2	4	62
27	255.255.255.224	3	8	30
28	255.255.255.240	4	16	14
29	255.255.255.248	5	32	6
30	255.255.255.252	6	64	2

3.3.9 Variable Length Subnet Mask

Internet Service Providers may face a situation where they need to allocate IP subnets of different sizes as per the requirement of customer. One customer may ask Class C subnet of 3 IP addresses and another may ask for 10 IPs. For an ISP, it is not feasible to divide the IP addresses into fixed size subnets, rather he may want to subnet the subnets in such a way which results in minimum wastage of IP addresses.

3.3.10 Basic Routing

Network Router and Router: A router is a device that works on a layer 3 and Sends data packets from one network to another. Network Route A network route is the way to send data packets from one network to another [2].

There are usually two types of routes:

➢ Static routing

➢ Dynamic routing

Cisco Mode Configuration Method:

There are usually 4 modes on a Cisco router

➢ EXE mode

➢ Privilege mode

➢ Global configuration mode

➢ Interface mode

EXE mode

The user's EXE mode is the normal operation mode for Cisco routers. After the Cisco device is started, IOS loads and comes in EXE mode. The symbol for EXE mode is ">". The following is the procedure for entering a password in this EXE mode:
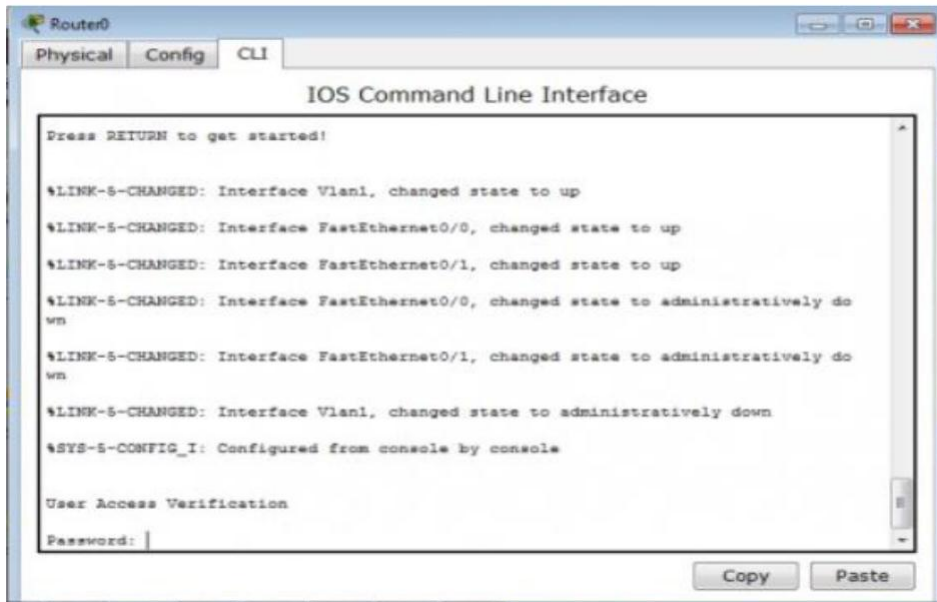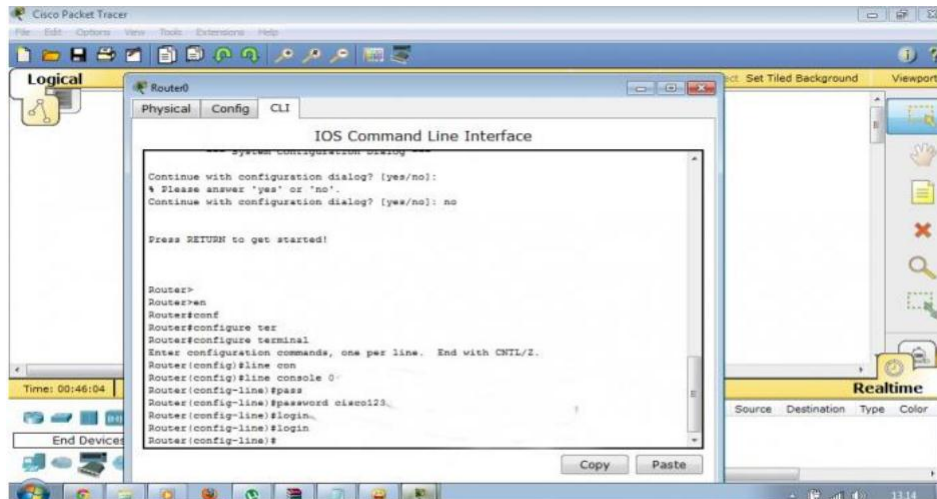
Figure 3.3: **Screenshot on EXE mode password and security**

Privilege mode: The advanced operation mode of Cisco routers is the privileged mode. The symbol for Privileged Mode is the "#" password configuration rule in Privileged Mode.
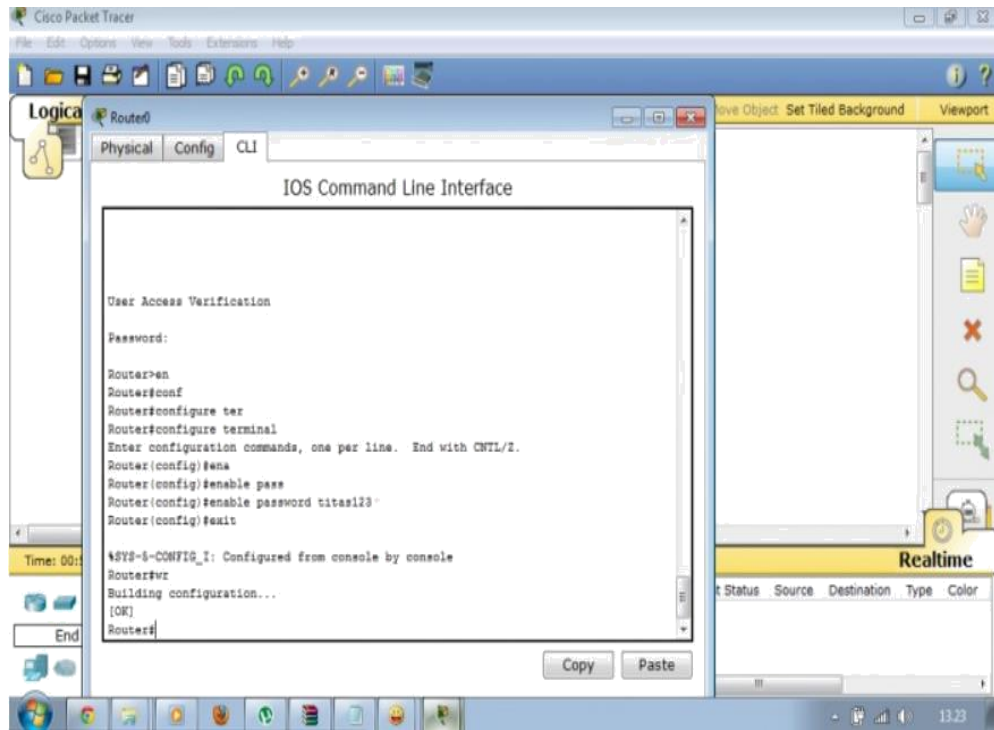
Figure 3.4: Screenshot on Privilege mode.

Global Configuration mode : Global configuration mode is the operation where a configuration command is given to work across devices. However, to switch to global configuration mode, you must first switch to privileged mode.

Configuring from terminal, memory, or network [terminal]?

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#

Interface mode: You have to switch to the mode to configure the specified Cisco device interface. Here's how to configure a port:
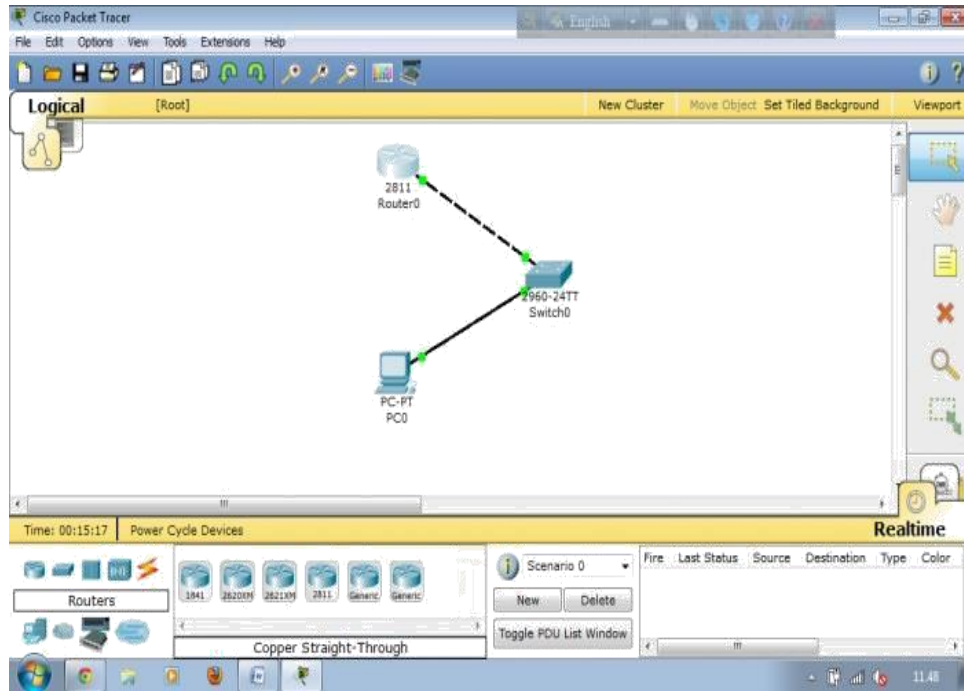
Figure 3.5: Screenshot on Interface mode.

3.3.11 Static Routing: In case of network too few routers are very close then static routing is good. As a result, the network will be less secure with less bandwidth [3].

Configure static routing :
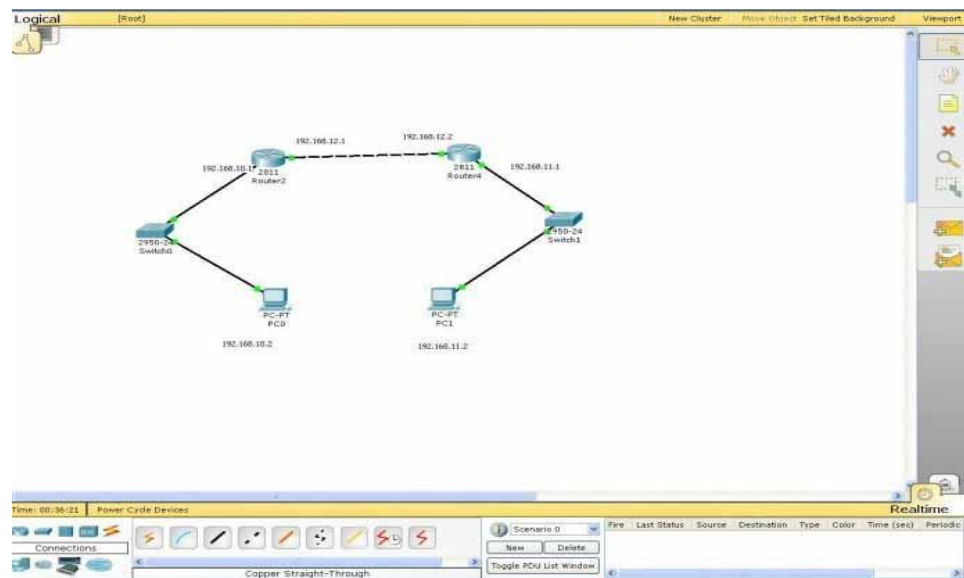
Figure 3.6: Screenshot on Static Router Design

End of static routing configuration. Now if we ping from host will understand. Make sure our configuration is correct. In the room we can see the replay by pinging. So our configuration is correct.
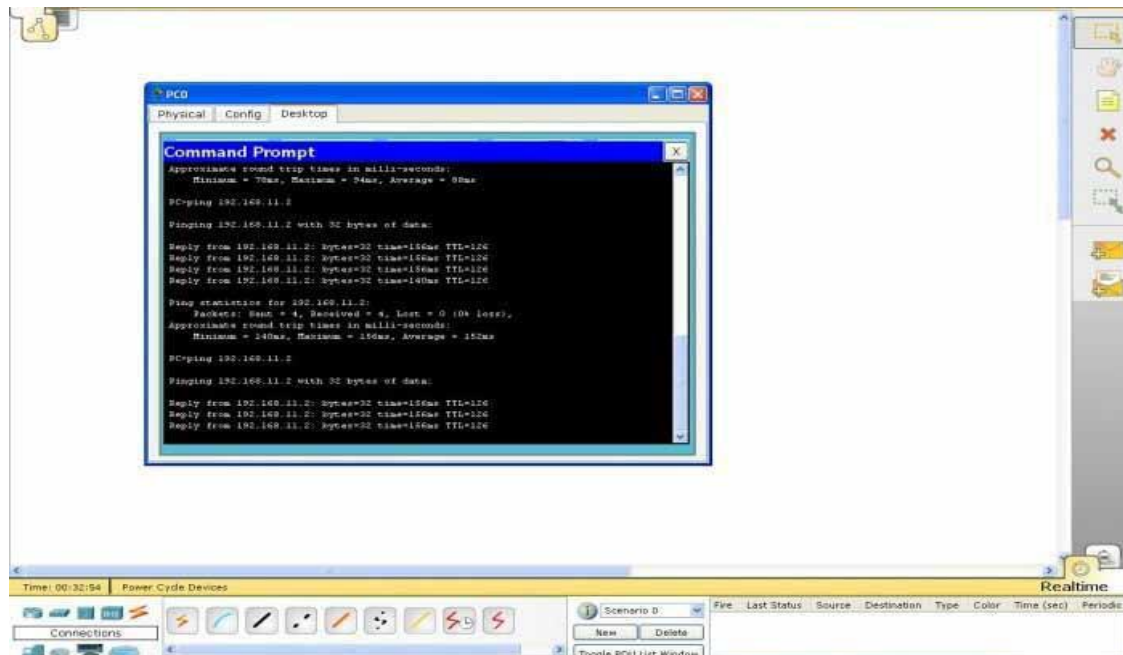
Figure 3.7: Screenshot on Ping Test

3.3.12 Dynamic Routing (EIGRP)

We try to learn about dynamic routing EIGRP. It is good to remember that CCNA testing involves a simulation with EIGRP. So the EIGRP is very important for CCNA testing [4]..

EIGRP Basic Concepts: EIGRP is an enhanced interior gateway routing protocol. This is a protocol that is actually a feature of the Link State Routing Protocol and it contains many features of the Distance Vector Routing Protocol. Considering these factors, EIGRP is called the Hybrid Routing Protocol. Now the question is what is Distance Vector Routing Protocol and Link State Routing Protocol? Through the Distance Vector Routing Protocol, the router can find out about the neighbor's router on the network and the location of all routers, such as how far the routers are located. And through the Link State Routing Protocol, the router learns about the hardships of each link and selects the best path.

First let's design the network
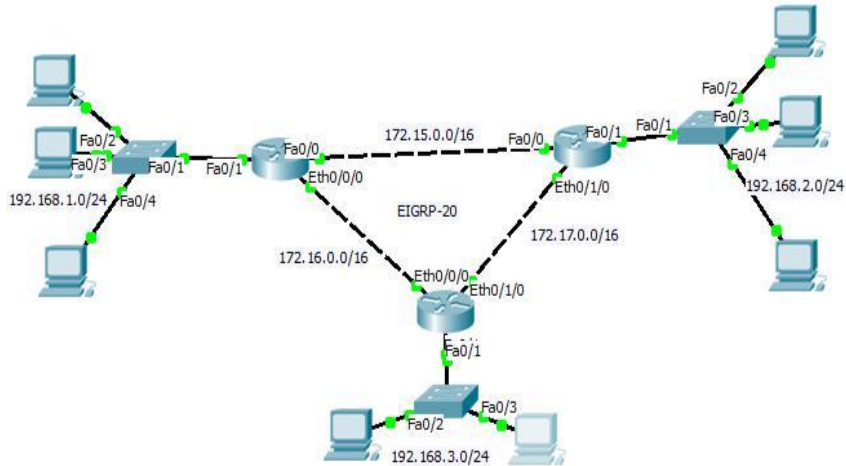
Figure 3.8: Design The Network

Let's start the EIGRP on the router :

Host Ping Test : EIGRP configuration is finished. Now we can check by pinging from one host to another
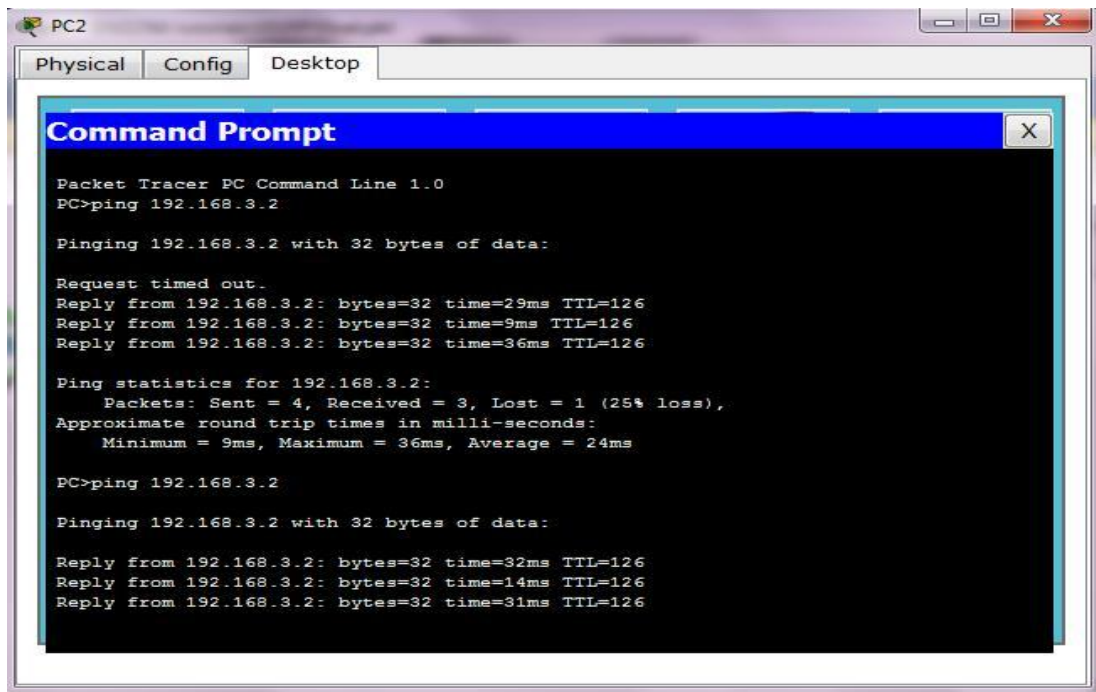
Fig 3.9: Screenshot on EIGRP Ping Test

3.3.13 Dynamic Routing (OSPF)

OSPF is Open Shortest Path First, a link state routing protocol developed based on Open Standard. So it works on other routers, including Cisco. OSPF is used as the interior gateway protocol [5]..

Configuring OSPF System :
- First let's design the network
- Assign a different name to each router.
- I set up the interfaces on each router.
- Let's start OSPF on each router.

First let's design the network :
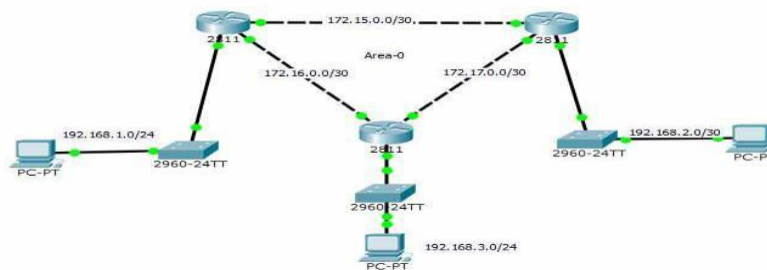
Figure 3.10: OSPF Network Design

Ping Test:

Figure 3.11: Ping OSPF Network Test

3.3.14 Switching Basic Concept & VLAN Configuration

Switching: The switch is a networking device that works on the second layer of the OSI model. The second layer of the OSI model is the Data link layer. In the Data link layer, the data is formatted in the frame. So when a frame is actually near the switch, the switch sends the frame to the destination MAC address [6].

VLAN (Virtual Local Area Network): VLAN is a virtual local area network. VLAN allows the physical ports of the device to be divided into several logical units. The purpose of VLAN is to reduce the size of the broadcast domain by doing VLAN and secure the network. As a result the network works very fast and well. Usually switch ports have VLAN1. The VLAN command is used to create a VLAN.

Let's try to learn VLAN through an example

The PC team of an office IT team and the HR team are in a switch. Now if the chairman of the company tells you that I want the IT team's users to be able to access the HR team's PCs and the HR team's PCs cannot access the IT team. Design such a network. How do you do this. Let's see
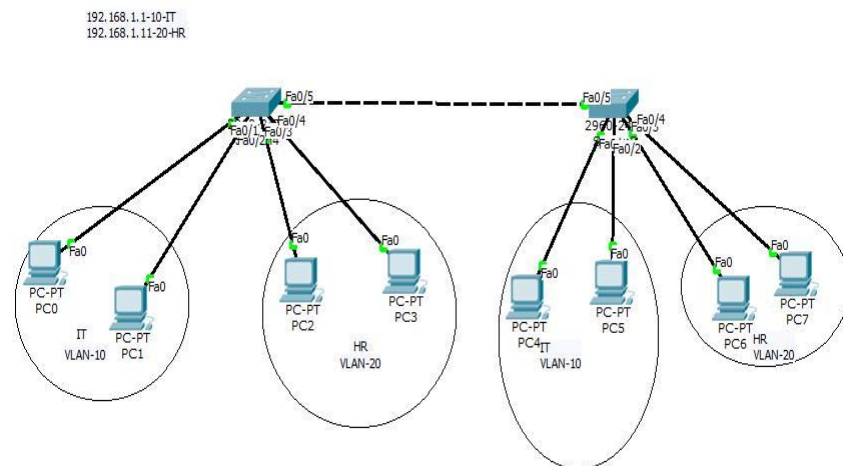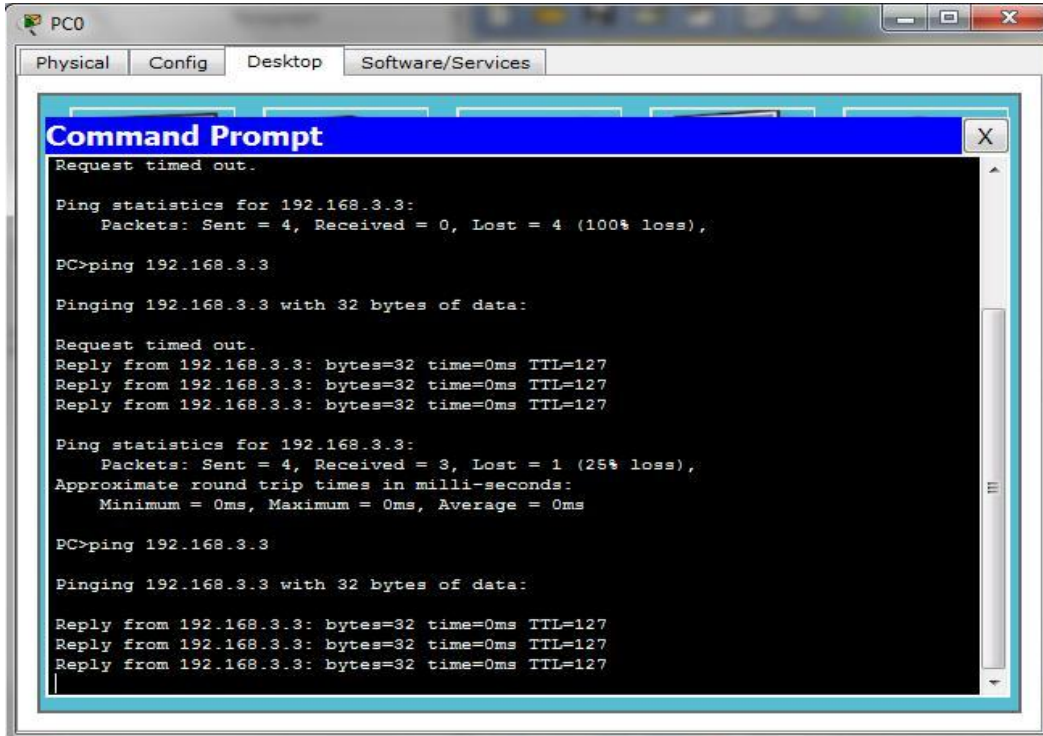
Figure 3.12: VLAN Design Network

Ping Test:

Figure 3.13:VLAN Network Ping Test

3.3.15 LAN (local area network):

A local area network (LAN) is a group of computers and associated devices that share a common communications line or wireless link and typically share the resources of a single processor or server within a small geographic area (for example, within an office building).

LAN networking comprises cables, switches, routers and other components that let users connect to internal servers, websites and other LANs via wide area networks.

Cables:

Category	Speed
CAT 1	Voice grade
CAT 2	4 Mbps
CAT 3	16Mbps
CAT 4	100Mbps
CAT 5	1000Mbps
CAT 5e	1000Mbps
CAT 6	1000Mbps
CAT 7	1000Mbps

Figure 3.14: Network Cables

Types of Cables: 3 types of Cables

1. Straight through Cables.
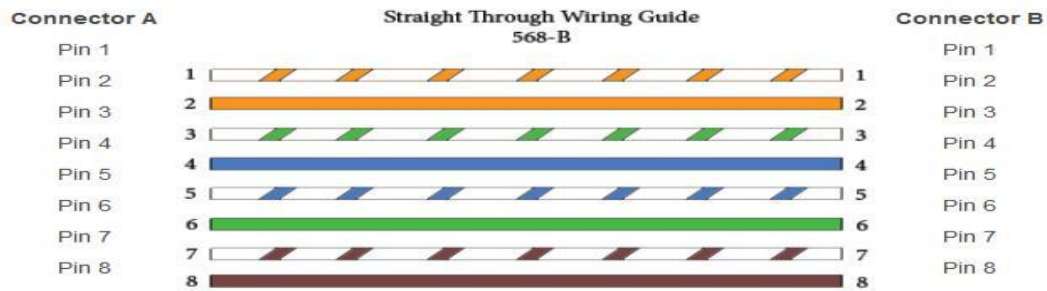
2. Crossover Cables.

3. Rolled over Cables.

Figure 3.14: Straight through Cables.
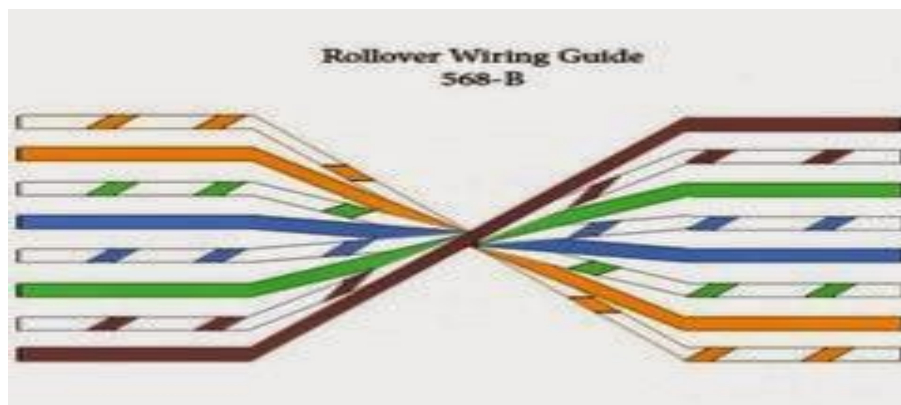

Figure:3.15 Crossover Cables.

Figure 3.16: Rolled over Cables

3.3.16 Connecting Computer in Networking or share the resources
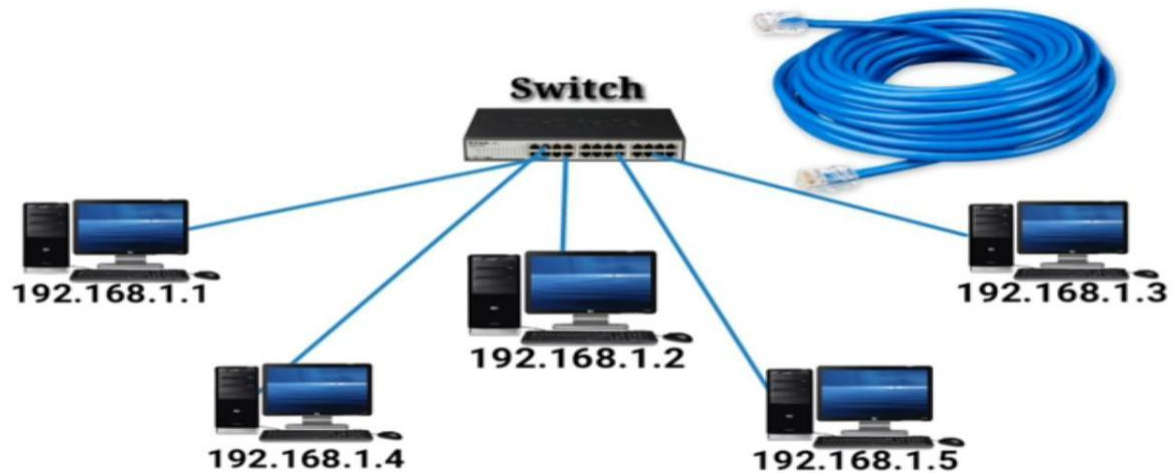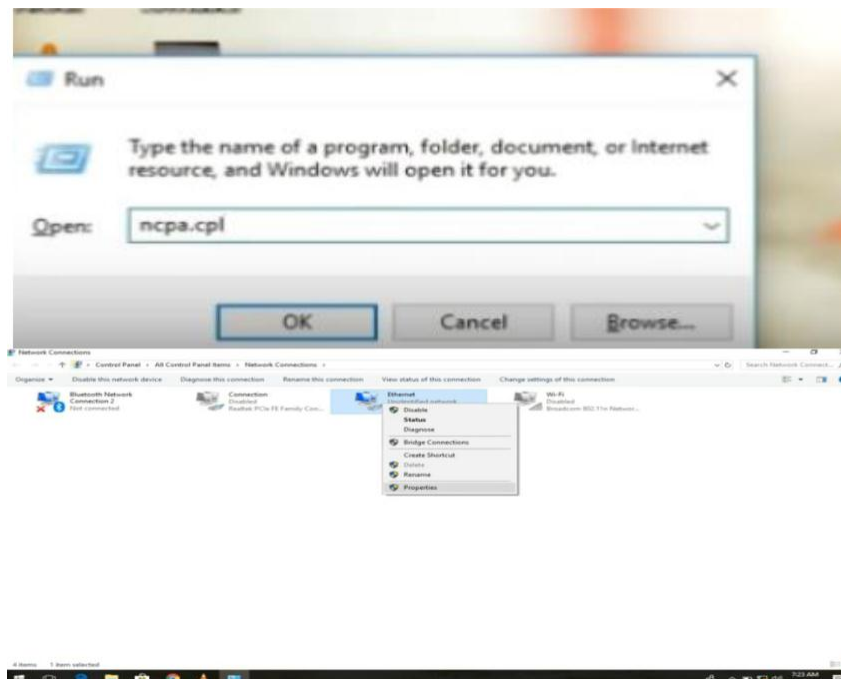
Show the LAN Connecting

Figure 3.17: Computer Network Cable Connecting

IP configuration : Given below IP configuration process .
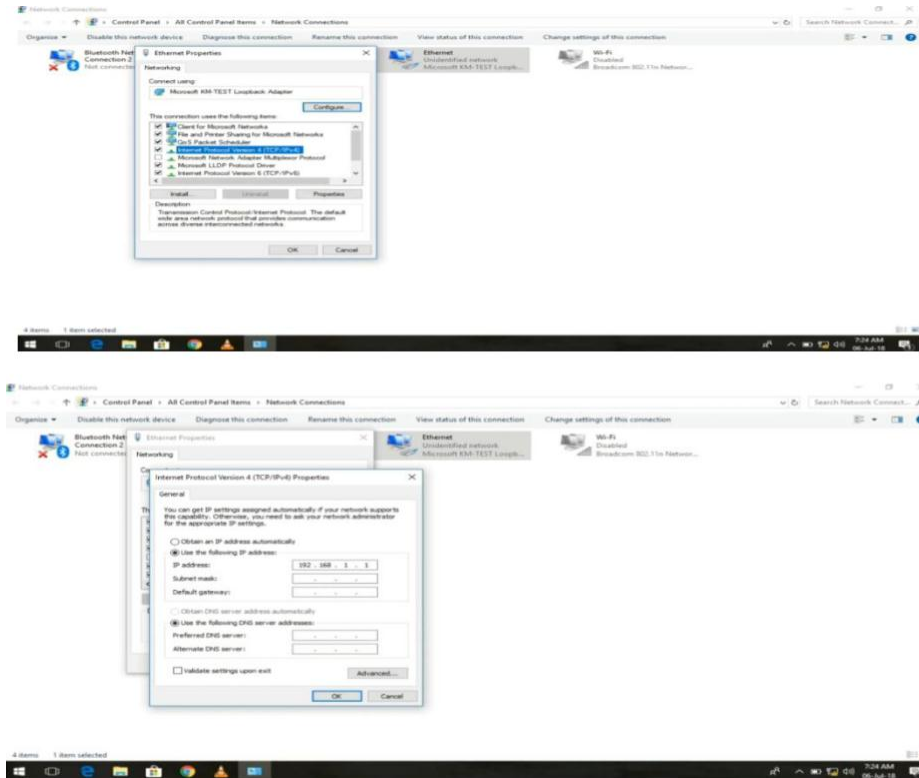
First step we go to run and write the ncpa.cpl

Figure 3.18: IP configuration step
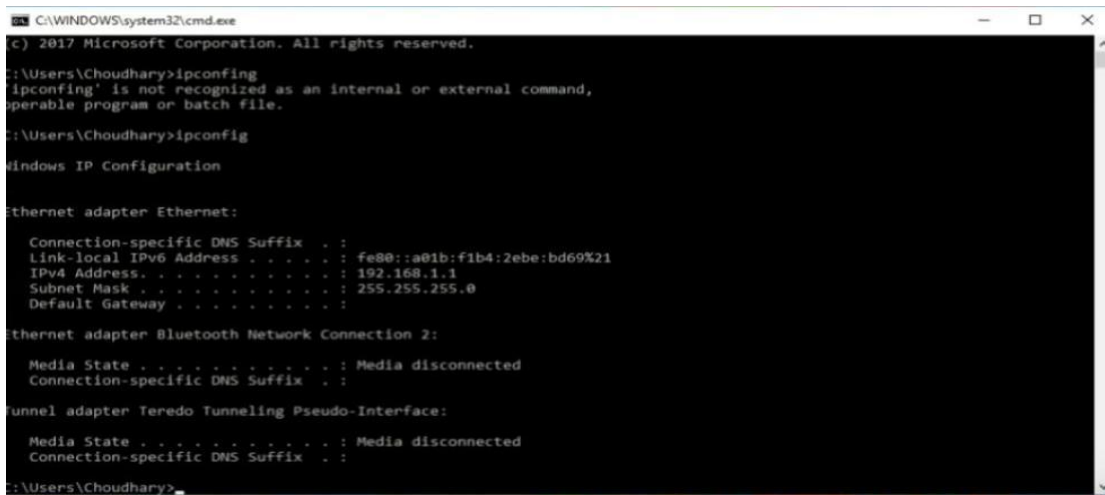
Check IP configuration:

**Figure 3.19: Check IP configuration**

3.3.17 Introduction to Oracle 11g

An Oracle database is an accumulation of information regarded as a unit. The reason for a database is to store and recover related data. Oracle Database is the primary database which is being used for big business processing, due to its adaptability and practical approach to handle data and software applications [7].
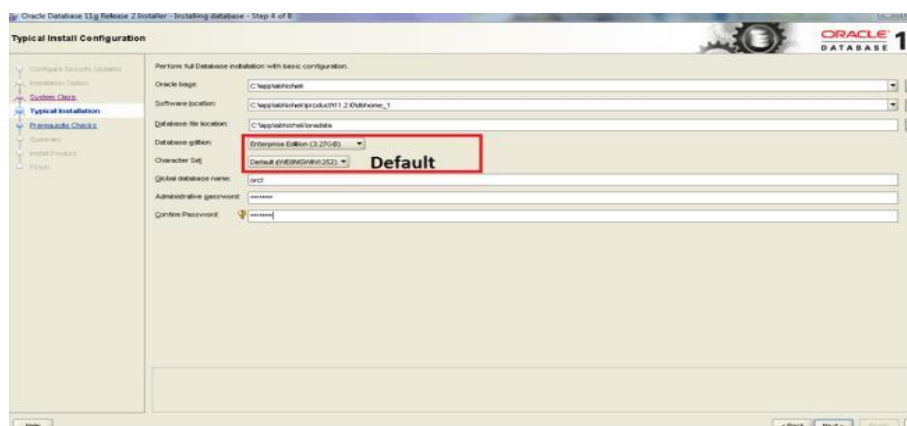
Oracle 11g Installation:
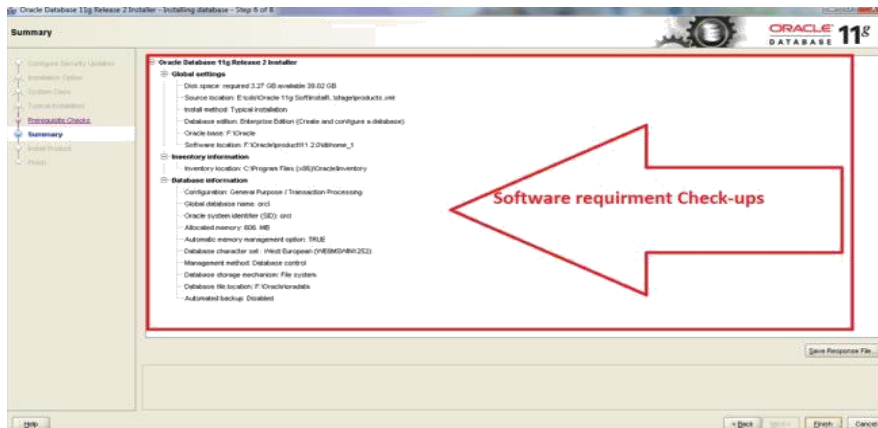
Install Oracle 11g on your Window 10 64-bit PC.

Step-1:
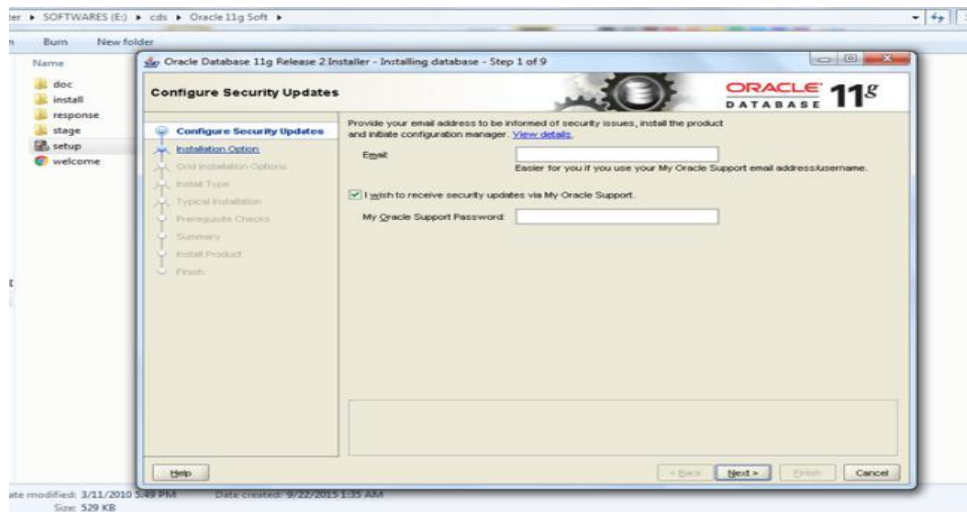
Step-2:

Step-4:

Step-5:
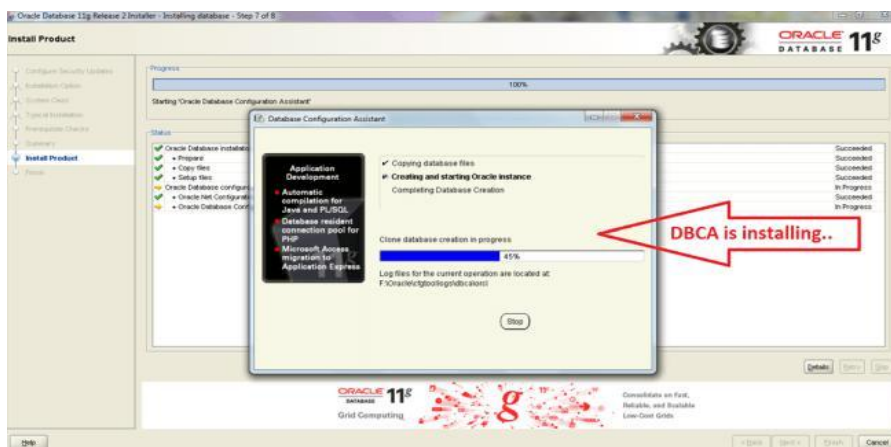
Figure 3.20: Screenshot on Oracle 11g on Installation

3.3.18 Oracle 11g SQL Commands

SQL full form Structured Query Language. **SQL** is an exceptional reason programming language that is utilized to interface with databases. It works by understanding and analyzing databases that include data fields in their tables. For example, we can take a large organization where a lot of data have to be stored and managed[8]..

Give the Some screenshot of SQL Query:

Connect system user command given below

Figure 3.21: Screenshot on Connect System user

User Create:

Figure 3.27: Screenshot on User Create

More then we are using the this type of SQL query

1. Operators

2. Expressions

3. Conditions

4 Common SQL DDL Clauses

5. SQL Queries and Sub queries

6. SQL Statements: ALTER CLUSTER to ALTER JAVA

7. SQL Statements: ALTER MATERIALIZED VIEW to ALTER SYSTEM

8. SQL Statements: ALTER TABLE to ALTER TABLESPACE

9. SQL Statements: ALTER TRIGGER to COMMIT

10. SQL Statements: CREATE CLUSTER to CREATE JAVA

11 SQL Statements: CREATE LIBRARY to CREATE SPFILE

12 SQL Statements: CREATE SYNONYM to CREATE TRIGGER

13 SQL Statements: CREATE TYPE to DROP ROLLBACK SEGMENT

14 SQL Statements: DROP SEQUENCE to ROLLBACK

15 SQL Statements: SAVEPOINT to UPDATE

3.3.19 Oracle 11g PL/ SQL Commands

PL/SQL is an extension of Structured Query Language (**SQL**) that is used in **Oracle**. Unlike **SQL**, **PL/SQL** allows the programmer to write code in a procedural format. ... Similar to other database languages, it gives more control to the programmers by the use of loops, conditions and object-oriented concepts [9].

More then we are using the this type of PL/SQL query

1. PL/SQL Control Statements

2. PL/SQL Collections and Records

3. PL/SQL Static SQL

4. PL/SQL Dynamic SQL

5. PL/SQL Subprograms

6. PL/SQL Triggers

7. PL/SQL Packages

8. PL/SQL Error Handling

3.3.20 Software implementation knowledge

Planning is an essential aspect of any successful project. However, it can be difficult to turn goals and strategy into tangible action, and, therefore, projects of all sizes and across all industries have a high tendency to fail. Implementation planning can reduce this chance of failure by helping turn strategy into action.

Software implementation process into three key:

Key 1: Planning, workflow, operations, system design

Key 2: Data migration

Key 3: User training

3.4 Challenges

In spite of the fact that the authorities were so occupied, they gave me wholehearted collaboration in the season of my temporary position and in setting up this report. As I needed to spend, enough time to take in the kinds of occupation doled out to me.

No works of art has now not requesting circumstances, anyway 4 months of my internship enjoy and to share companions subsequent to tuning the satisfied hour, I've discovered that there's a few not unusual challenges intern. I believe it's far that interns three issues: unpaid, transient, and they are in a race to advantage understanding. Difficulties although the officers had been so occupied, they gave me entire hearted cooperation within the time of my internship and furthermore in preparing this document. While accumulating data, I had confined get right of entry to a few information for confidentiality motive. As I had to spend enough time to analyze the sorts of action assigned to me and furthermore scope up with the fresher kind of expert work surroundings with new people and the strategy of operating clearly this area is extremely sensitive and aggressive by utilizing its nature.

CHAPTER 04

COMPETENCIES AND SMART PLAN

4.1 Competencies Earned

Networking and software side has numerous field of workstation engineers are chargeable for executing, looking after, helping, creating and, at times, planning discussion arranges inside an organization or among undertakings. Their motivation is to ensure the integrity of high accessibility network infrastructure to offer most general execution for his or her clients. Clients might be faculty, customers, clients and providers. engineer may coordinate inside as a part an organization's IT support group, or remotely as a part of an outsourced IT networking consultancy firm working with some of clients. Obligations may be motivated by the scale and sector of the utilizing enterprise. For example, in a large investment financial foundation you can have specific duty for one place of the machine. In a little boss, the engineer may also need to problem shoot for any IT-related problem that emerges.

4.1 Smart Plan

Our Networking Design and Engineering system allows for complete development and upgrades to your current networking infrastructure, while allowing for future network designs as your business expands and your operational needs change.

We understand that creating a network that works in today''s world of many vendors and protocols requires more time and experience than you possess. Allow Smart Homes to use their highly skilled, capable and experienced resources to create a fully integrated system that meet your operational objectives. The focus of our solutions centers on bringing cutting edge technology solutions driven by our client''s needs. We approach each project personally, as each of our clients are unique with particular needs.

4.3 Reflections

Interns get the practical experience in the field of engineering. It is help to build experience in engineering job. In intern period, I learned Networking and software implementation. IT is a shrewd and dynamic profession at present.

I learned hands-on-expertise in network and network security . This experience will assist me with being making strong network. Intern gives propel traps and outings that honed by

the professional. Now I know how to oversee one project and how to beat basic circumstance and getting the experience to work on a professional team.

CHAPTER 5

CONCLUSION AND FUTURE CAREER

5.1 Discussion and Conclusion

The objective of this temporary job is to pick up the information and aptitudes need to create network Setup and Software implementation. The entry level position centers around Fundamental of Data Communication, Software implementation is a full-included, strong Oracle 11g working framework with an form development of related free programming, equipped for supporting elite system administrations. The quality of networking makes it a minimal effort, solid, bolstered processing stage suitable for the corporate server condition. This complete hands-on course gives the learning and aptitudes you have to introduce, arrange and manage a networking and Software mission-basic system administrations. You figure out how to introduce what's more, update key programming parts with the most recent forms and improve server security. Networking is the working framework which offers such a wide verity of solid, stable and successful administration. We decision this working framework not due to its administrations but rather it is thoroughly free. Networking and Software offers a one a kind chances to learn frameworks programming with hand on involvement. Since we have the source code accessible and an overall system of guides and teammates, we can investigate any subject we want to. Different parts of Networking and Software have been examined or created as a feature of scholastic work, for example, graduate postulations.

5.2 Scope for Future Career

Our fundamental goal of this Internship was to utilize our gathered knowledge in real field. In this Internship I learnt about various ideas Networking and software which may plan a Networking and software implementation. Once more, a Networking and software offer lots of features which may appropriate to satisfy any organization. Here in this Intern I configure almost every feature and worked on Networking and software implementation. Therefore we will ready to Networking design and software a manage properly.

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