Experiment 2

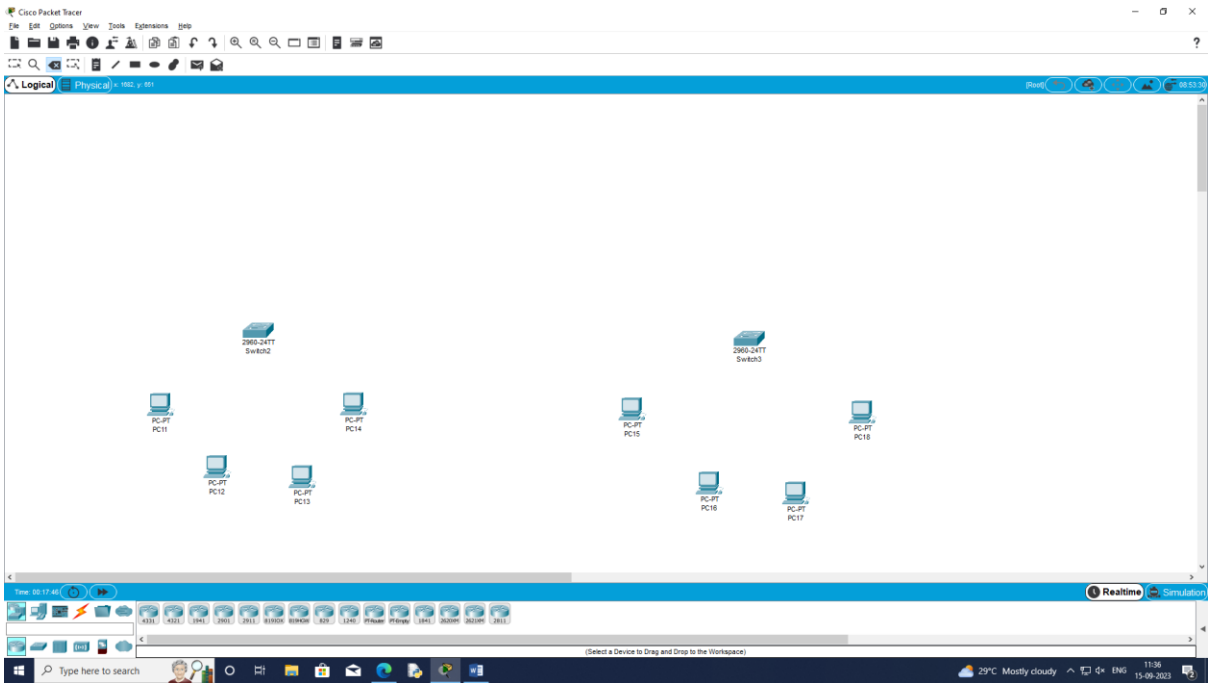
Jhanvi Parekh

60009210033

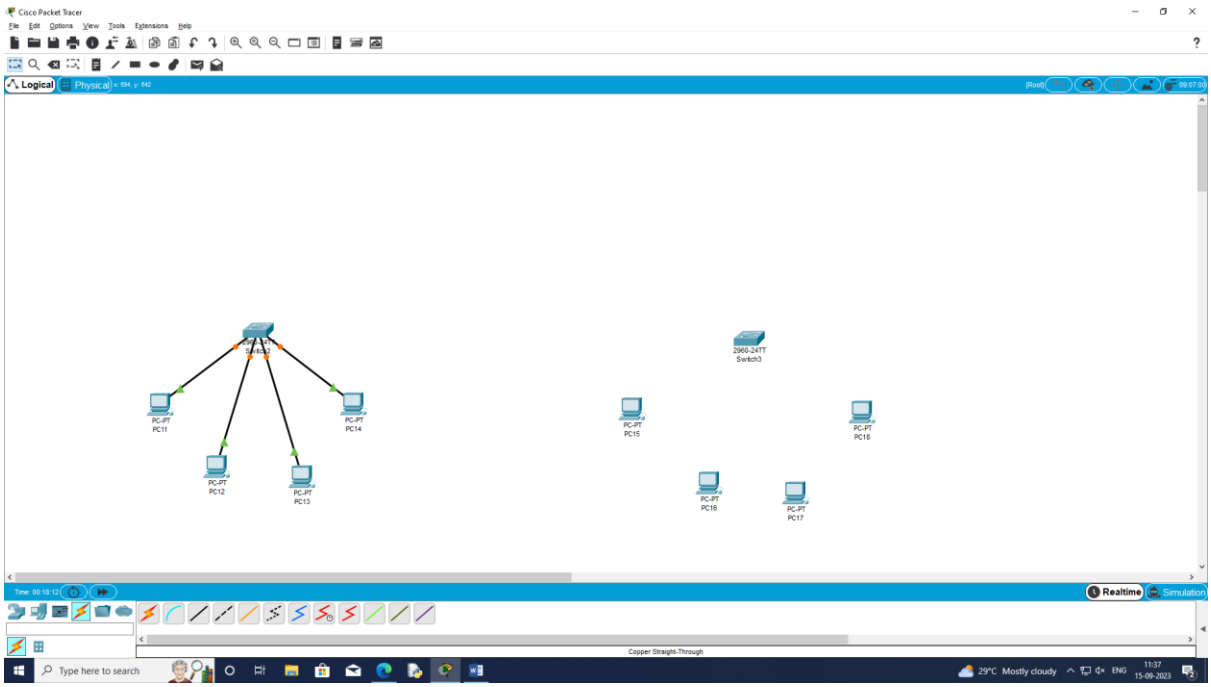
D11

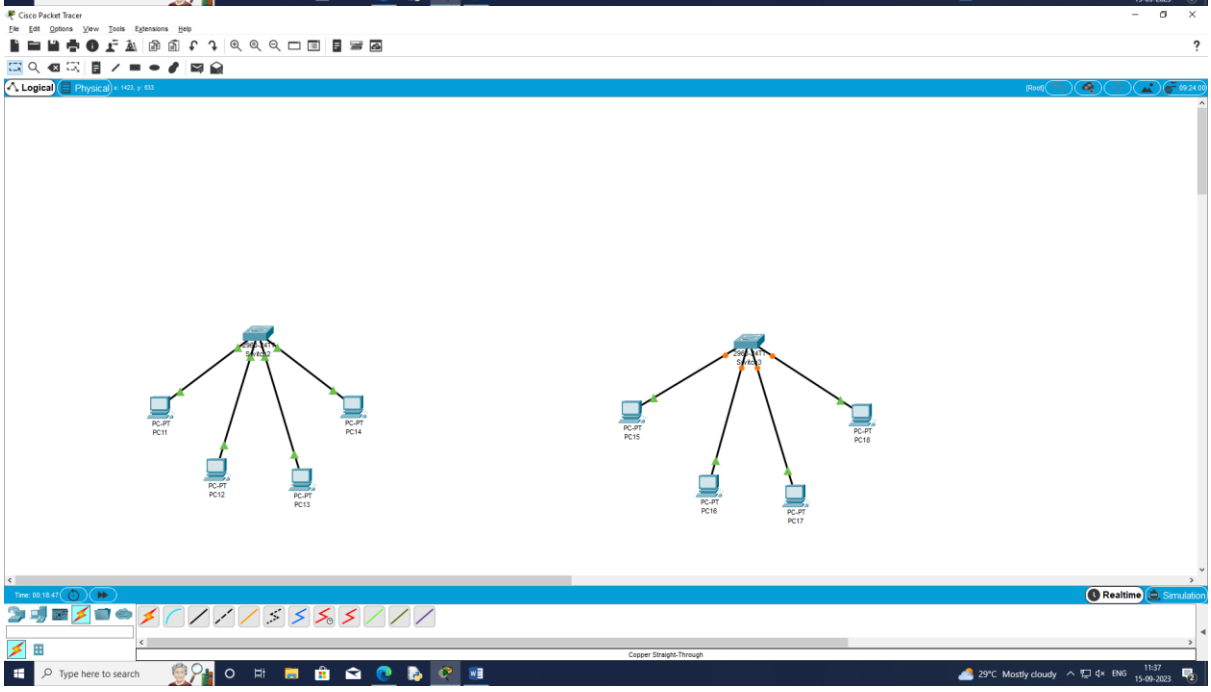
ROUTER

Step 1: Select 4 PC’s and 2 switches.

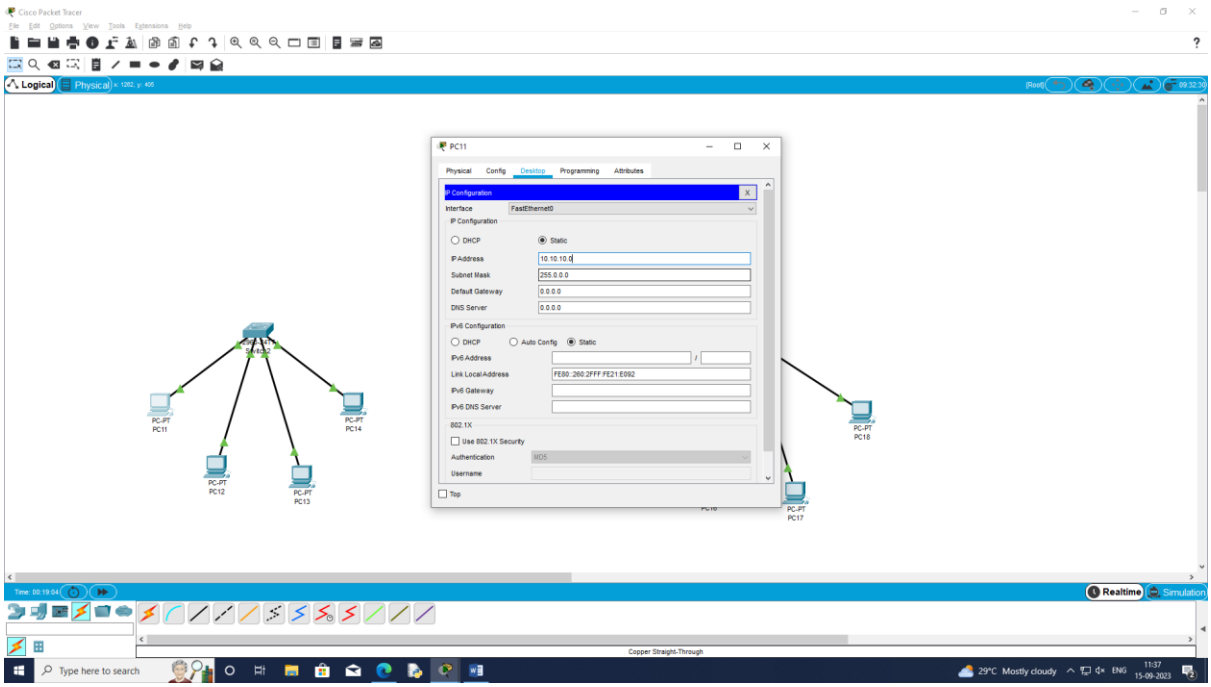


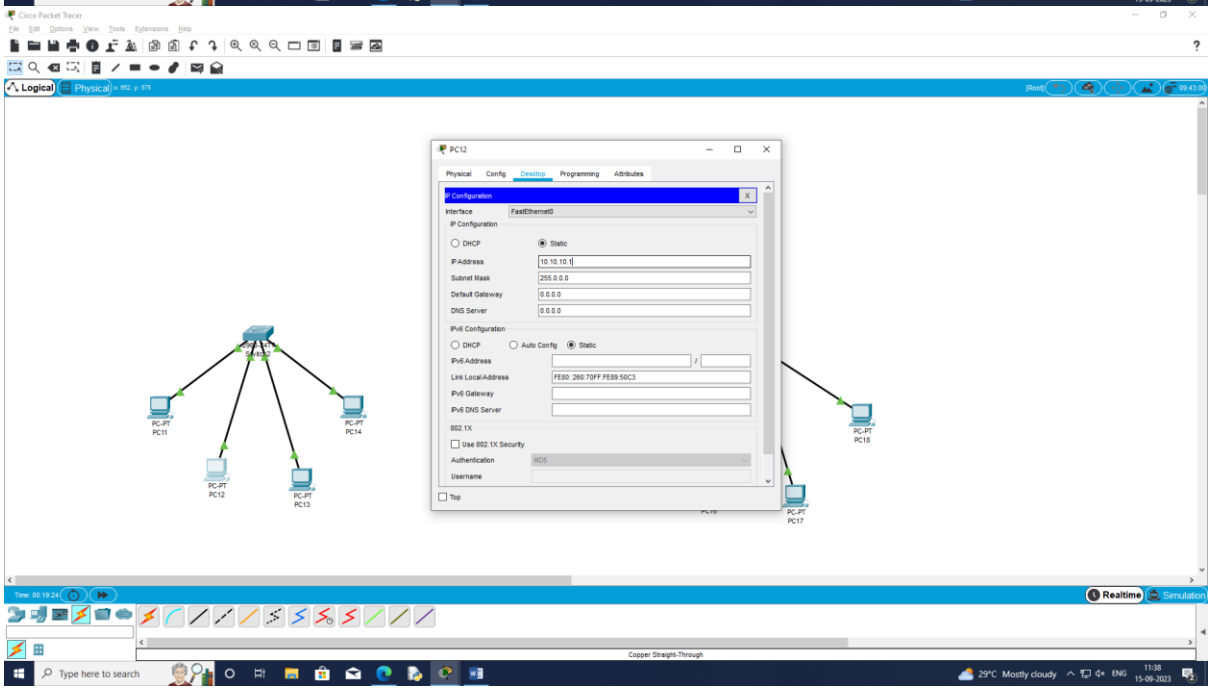
Step 2: Connect the PC’s with a switch as shown through a straight through cable.

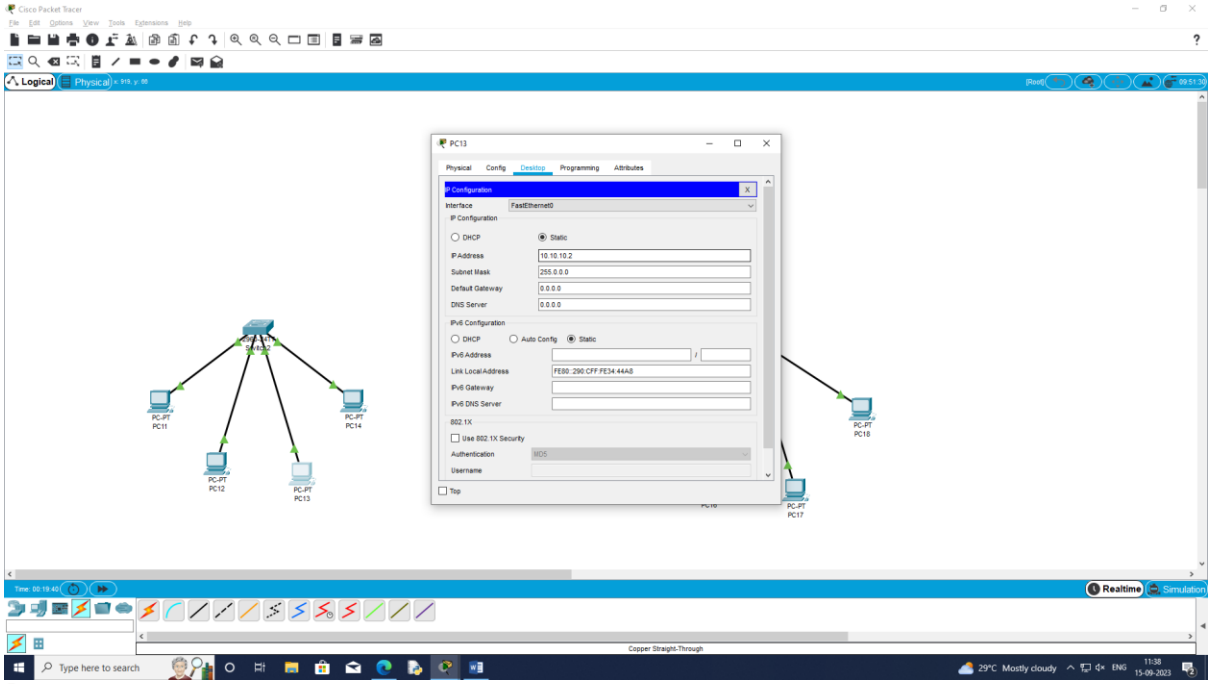


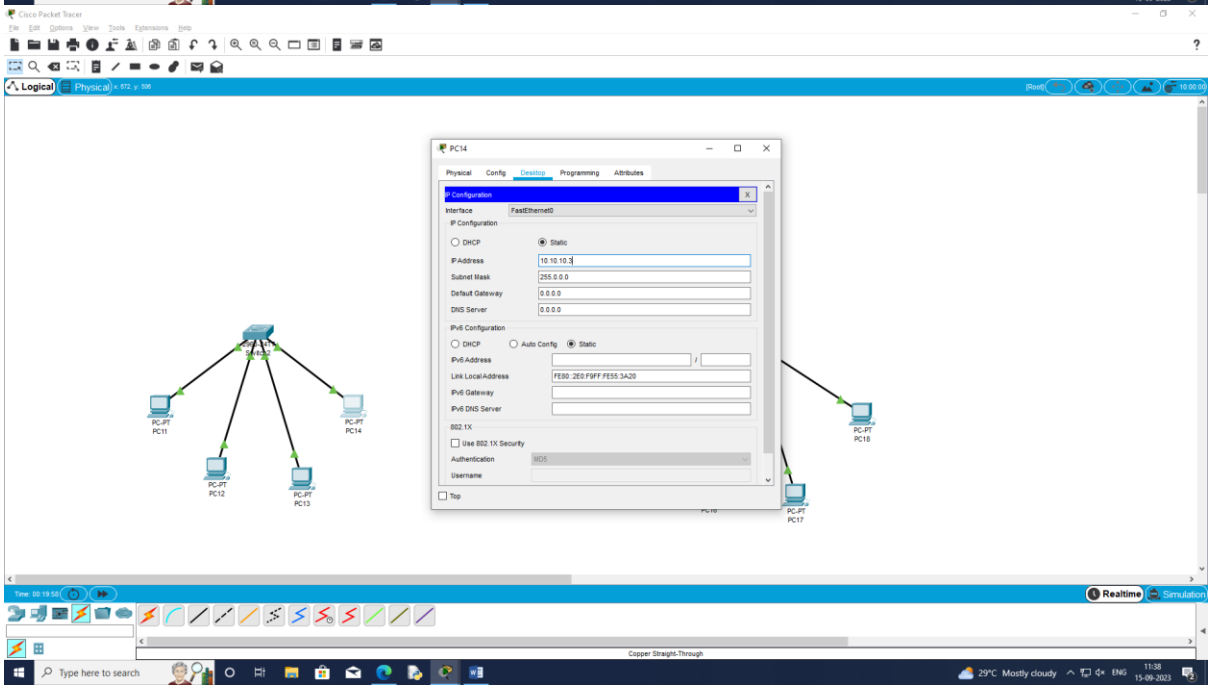


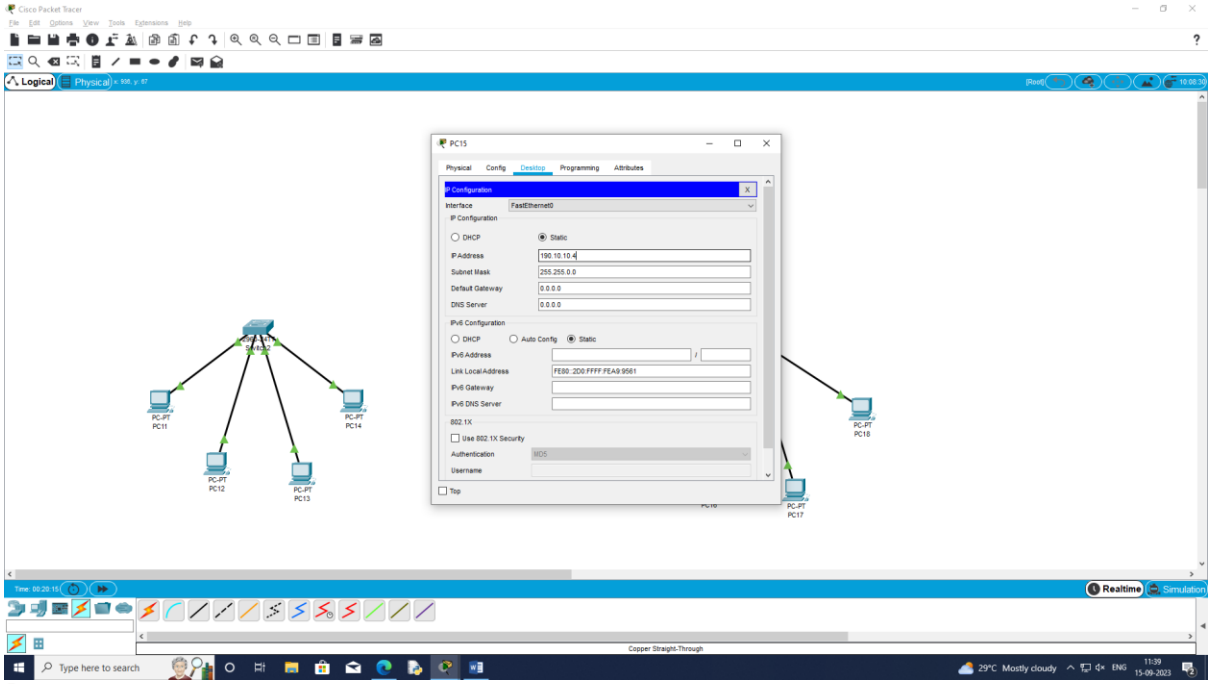
Step 3: Give IP address to all the PC’s. Giving first four PC’s IP address in the range of 10.10.10.4 and the next four PC’s in the range of 190.10.10.8.

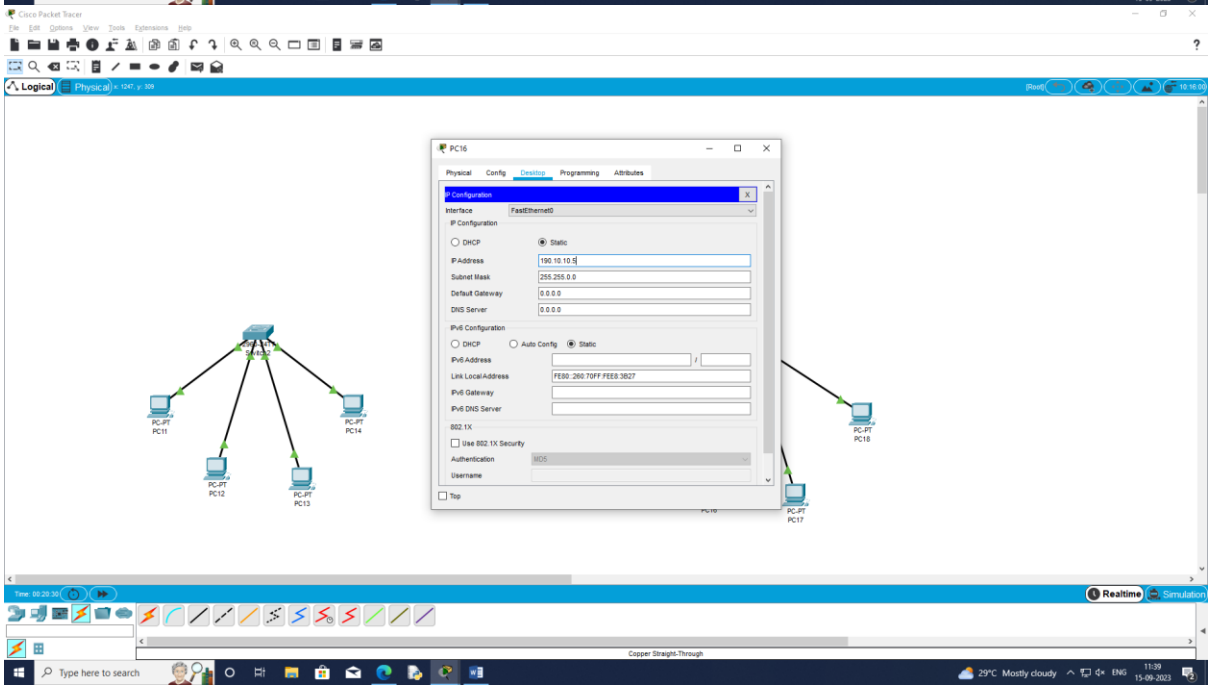


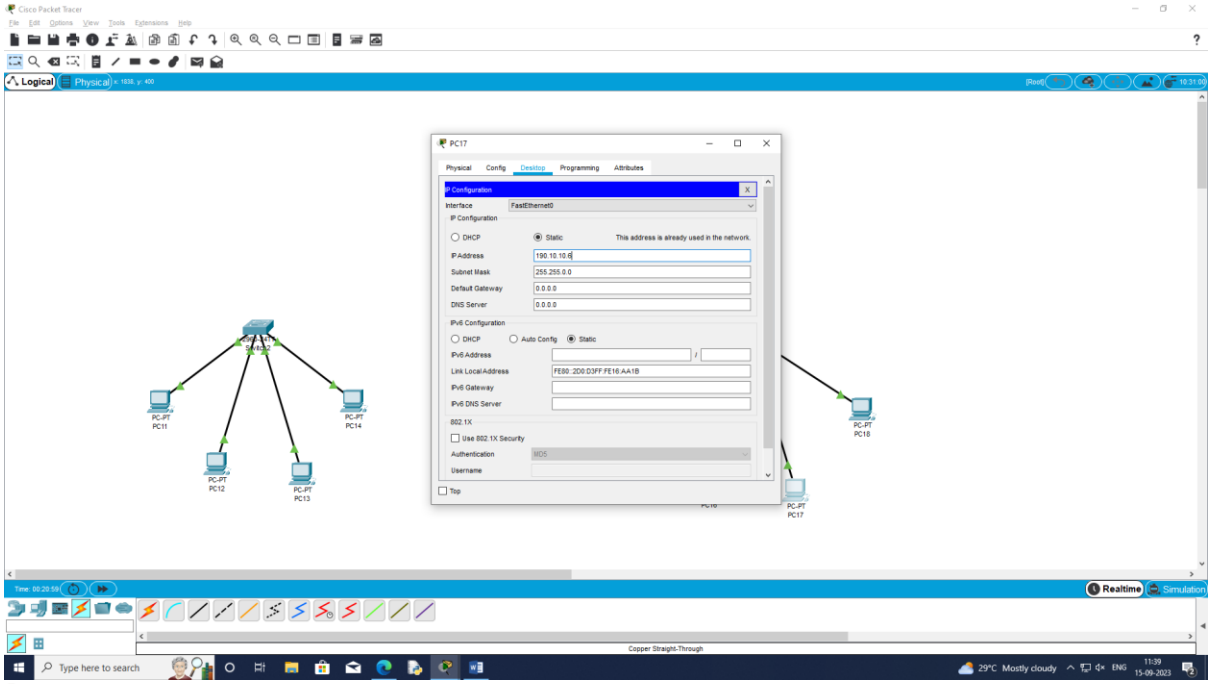


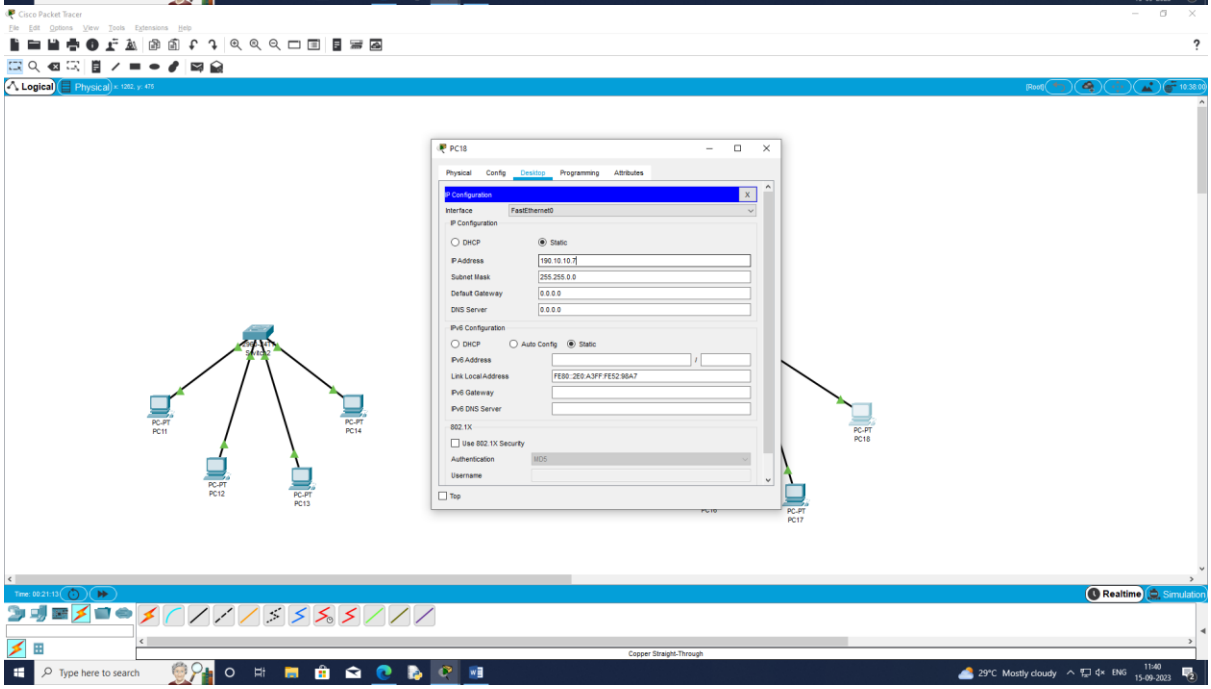

Cisco Packet Tracer
Logical
Physical
PC13
Physical
Config
Desktop
Programming
Attributes
IP Configuration
Interface
FastEthernet0
DHCP
Static
IP Address
10.10.10.2
Subnet Mask
255.0.0.0
Default Gateway
0.0.0.0
DNS Server
0.0.0.0
IPv6 Configuration
DHCP
Auto Config
Static
IPv6 Address
Link Local Address
FE80::290:CFF:FE34:44AB
IPv6 Gateway
IPv6 DNS Server
802.1X
Use 802.1X Security
Authentication
MD5
Username
Top
PC-PT PC11
PC-PT PC12
PC-PT PC13
PC-PT PC14
PC-PT PC17
PC-PT PC18
Realtime
Simulation
Copper Straight-Through
Type here to search
29°C Mostly cloudy
ENG
11:38
15-09-2023


Cisco Packet Tracer
Logical
Physical
PC14
Physical
Config
Desktop
Programming
Attributes
IP Configuration
Interface
FastEthernet0
DHCP
Static
IP Address
10.10.10.3
Subnet Mask
255.0.0.0
Default Gateway
0.0.0.0
DNS Server
0.0.0.0
IPv6 Configuration
DHCP
Auto Config
Static
IPv6 Address
Link Local Address
FE80::2E0:F9FF:FE55:3A20
IPv6 Gateway
IPv6 DNS Server
802.1X
Use 802.1X Security
Authentication
MD5
Username
Top
PC-PT PC11
PC-PT PC12
PC-PT PC13
PC-PT PC14
PC-PT PC17
PC-PT PC18
Realtime
Simulation
Copper Straight-Through
Type here to search
29°C Mostly cloudy
ENG
11:38
15-09-2023

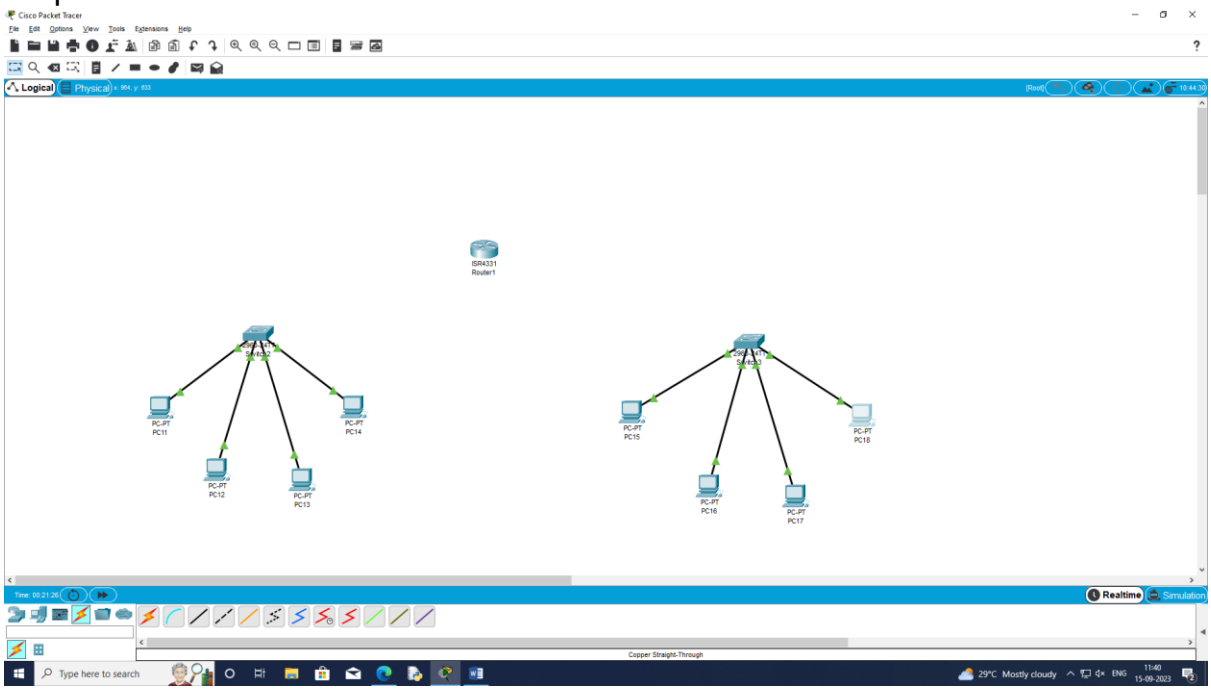

PC15
Physical
Config
Desktop
Programming
Attributes
IP Configuration
Interface
FastEthernet0
DHCP
Static
IP Address
190.10.10.4
Subnet Mask
255.255.0.0
Default Gateway
0.0.0.0
DNS Server
0.0.0.0
IPv6 Configuration
DHCP
Auto Config
Static
IPv6 Address
Link Local Address
FE80::2D0:FFFF:FEA9:9561
IPv6 Gateway
IPv6 DNS Server
802.1X
Use 802.1X Security
Authentication
MD5
Username
Top
PC-PT PC11
PC-PT PC12
PC-PT PC13
PC-PT PC14
PC-PT PC17
PC-PT PC18
Logical
Physical
Realtime
Simulation
Copper Straight-Through
Type here to search
29°C Mostly cloudy
ENG
11:39
15-09-2023


PC16
Physical
Config
Desktop
Programming
Attributes
IP Configuration
Interface
FastEthernet0
DHCP
Static
IP Address
190.10.10.5
Subnet Mask
255.255.0.0
Default Gateway
0.0.0.0
DNS Server
0.0.0.0
IPv6 Configuration
DHCP
Auto Config
Static
IPv6 Address
Link Local Address
FE80::260:70FF:FEE8:3B27
IPv6 Gateway
IPv6 DNS Server
802.1X
Use 802.1X Security
Authentication
MD5
Username
Top
PC-PT PC11
PC-PT PC12
PC-PT PC13
PC-PT PC14
PC-PT PC17
PC-PT PC18
Logical
Physical
Realtime
Simulation
Copper Straight-Through
Type here to search
29°C Mostly cloudy
ENG
11:39
15-09-2023

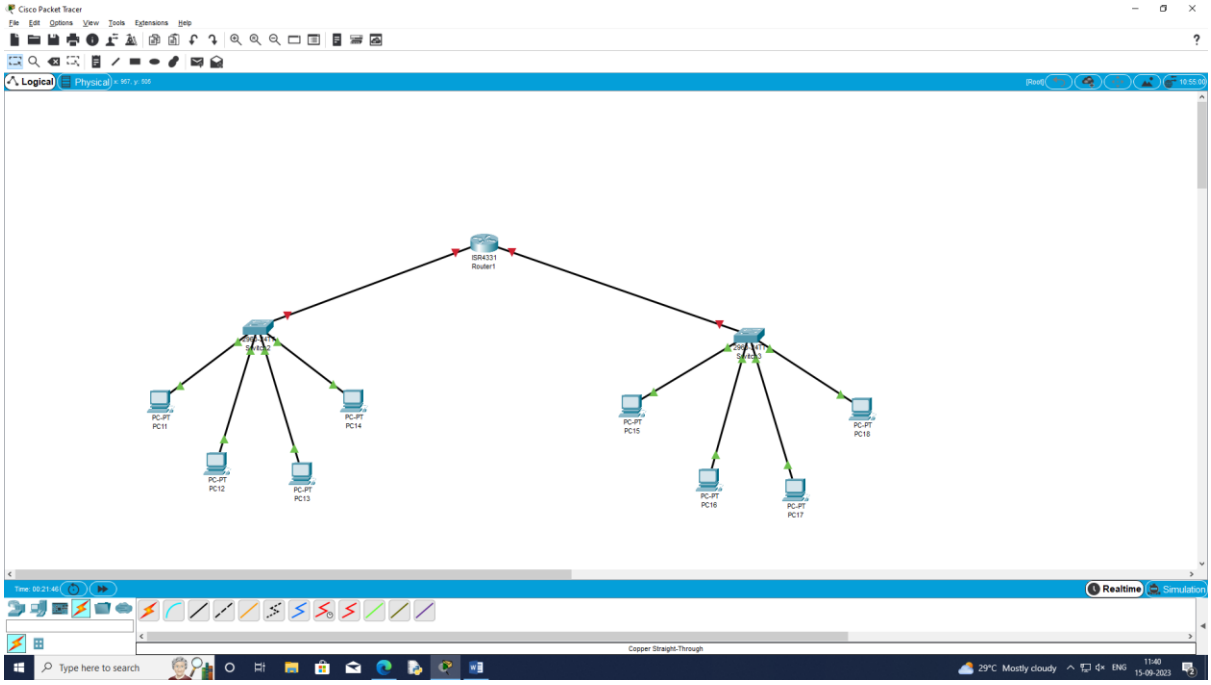

Cisco Packet Tracer
Logical
Physical
PC17
Physical
Config
Desktop
Programming
Attributes
IP Configuration
Interface
FastEthernet0
DHCP
Static
This address is already used in the network.
IP Address
190.10.10.6
Subnet Mask
255.255.0.0
Default Gateway
0.0.0.0
DNS Server
0.0.0.0
IPv6 Configuration
DHCP
Auto Config
Static
IPv6 Address
Link Local Address
FE80::2D0:D3FF:FE16:AA1B
IPv6 Gateway
IPv6 DNS Server
802.1X
Use 802.1X Security
Authentication
MD5
Username
Top
PC-PT PC11
PC-PT PC12
PC-PT PC13
PC-PT PC14
PC-PT PC17
PC-PT PC18
Realtime
Simulation
Copper Straight-Through
Type here to search
29°C Mostly cloudy
ENG
11:39
15-09-2023


Cisco Packet Tracer
Logical
Physical
PC18
Physical
Config
Desktop
Programming
Attributes
IP Configuration
Interface
FastEthernet0
DHCP
Static
IP Address
190.10.10.7
Subnet Mask
255.255.0.0
Default Gateway
0.0.0.0
DNS Server
0.0.0.0
IPv6 Configuration
DHCP
Auto Config
Static
IPv6 Address
Link Local Address
FE80::2E0:A3FF:FE52:98A7
IPv6 Gateway
IPv6 DNS Server
802.1X
Use 802.1X Security
Authentication
MD5
Username
Top
PC-PT PC11
PC-PT PC12
PC-PT PC13
PC-PT PC14
PC-PT PC17
PC-PT PC18
Realtime
Simulation
Copper Straight-Through
Type here to search
29°C Mostly cloudy
ENG
11:40
15-09-2023

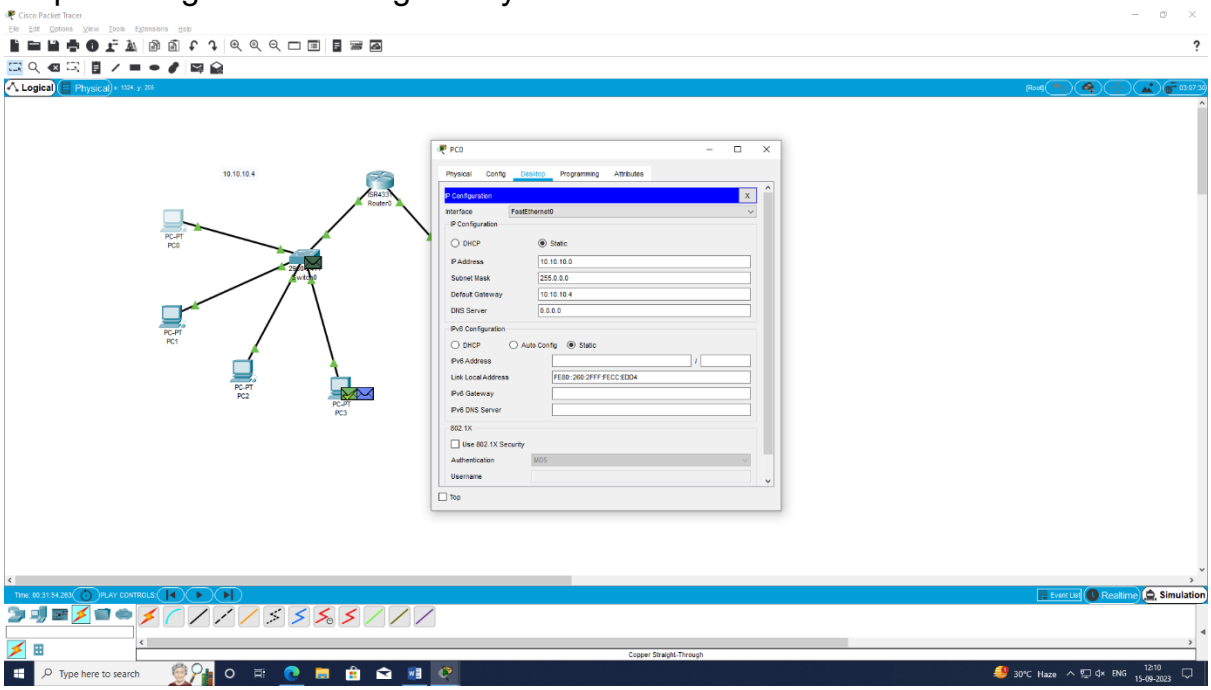
Step 4: Select a router.

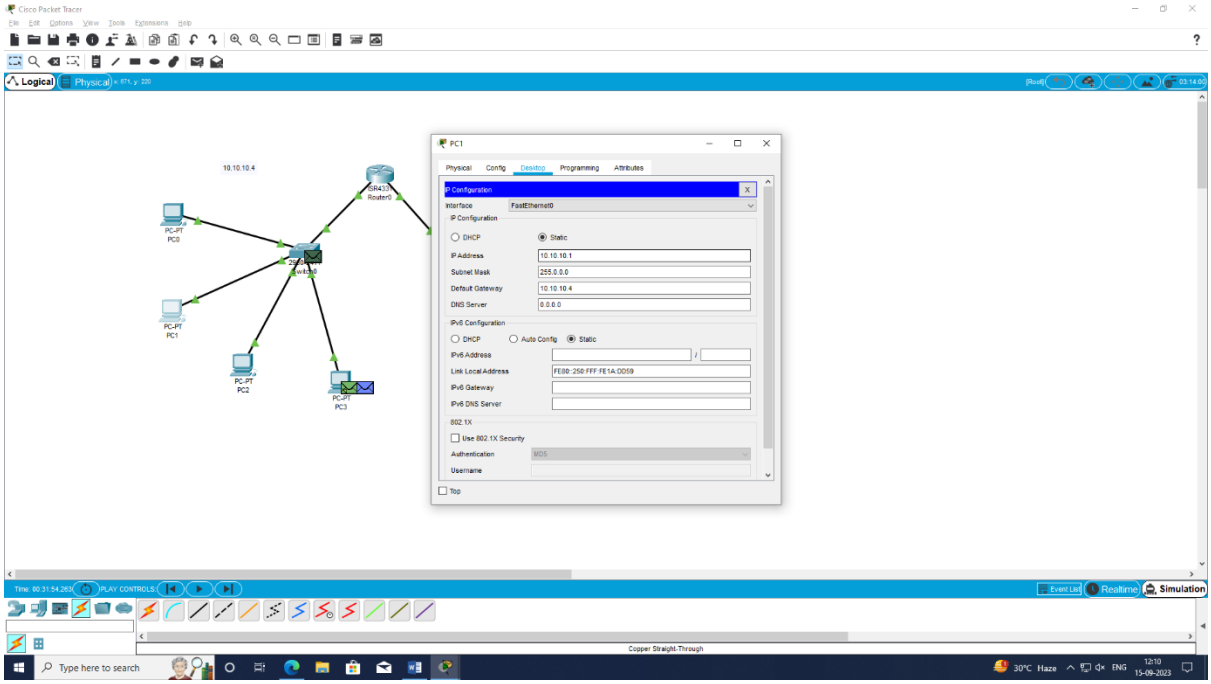


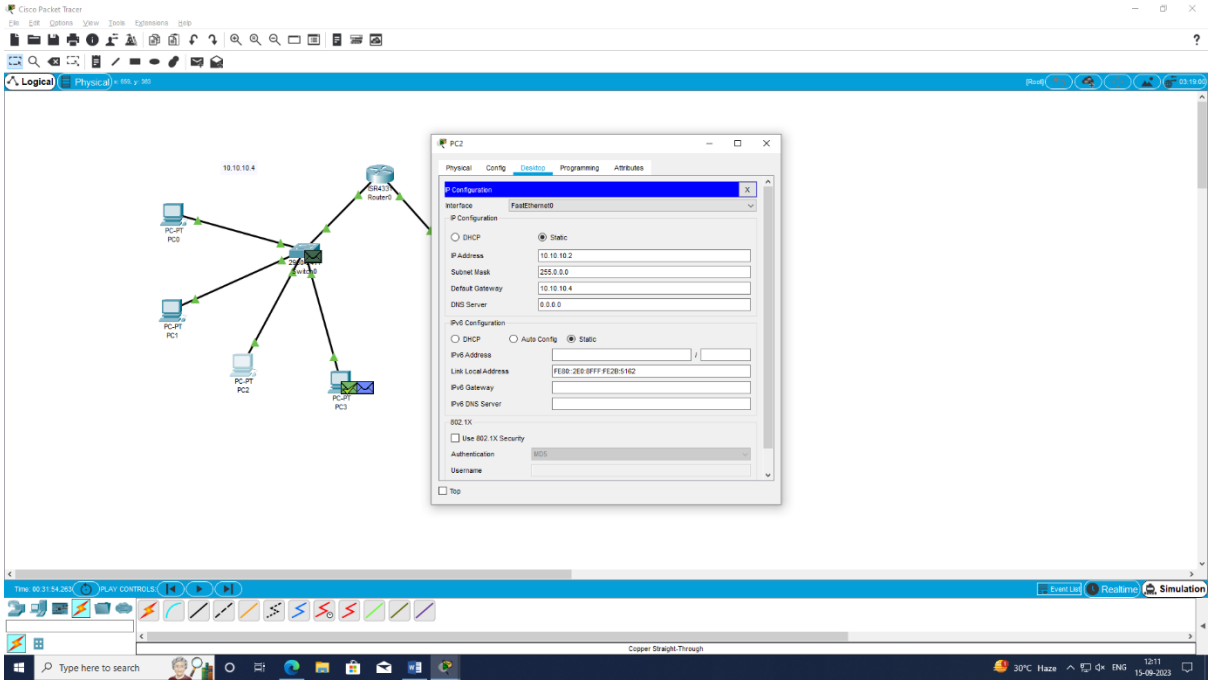
Step 5: Connect the router to the switches as shown through a straight through cable.

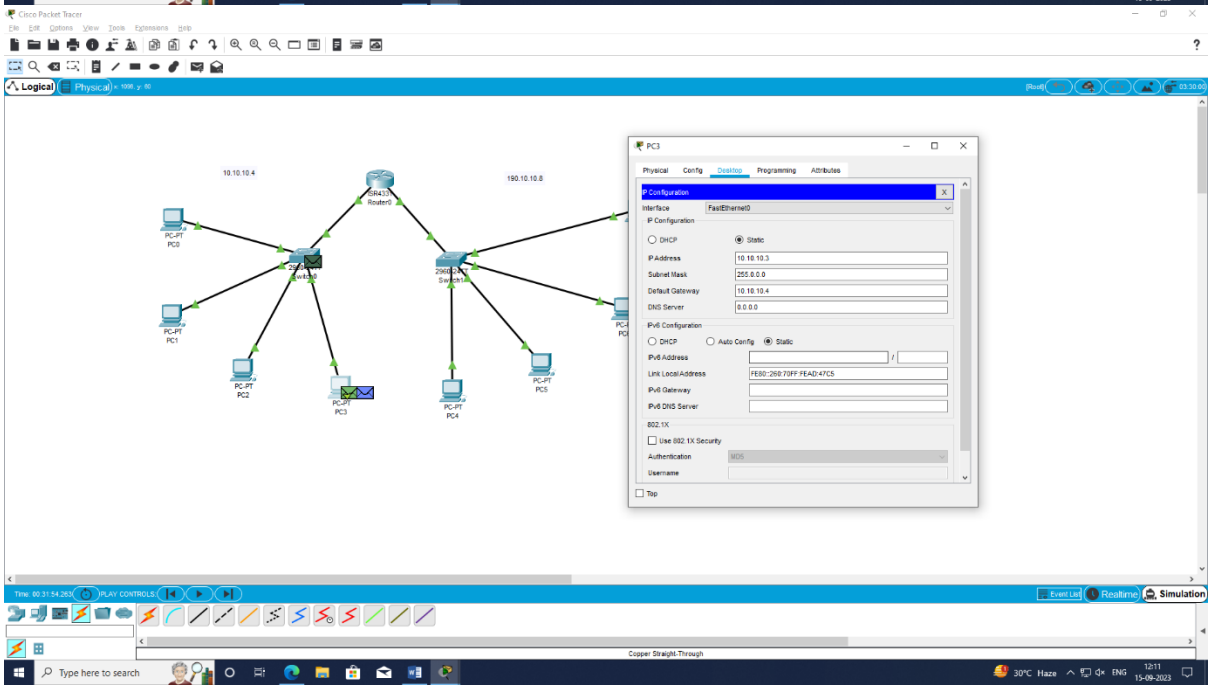


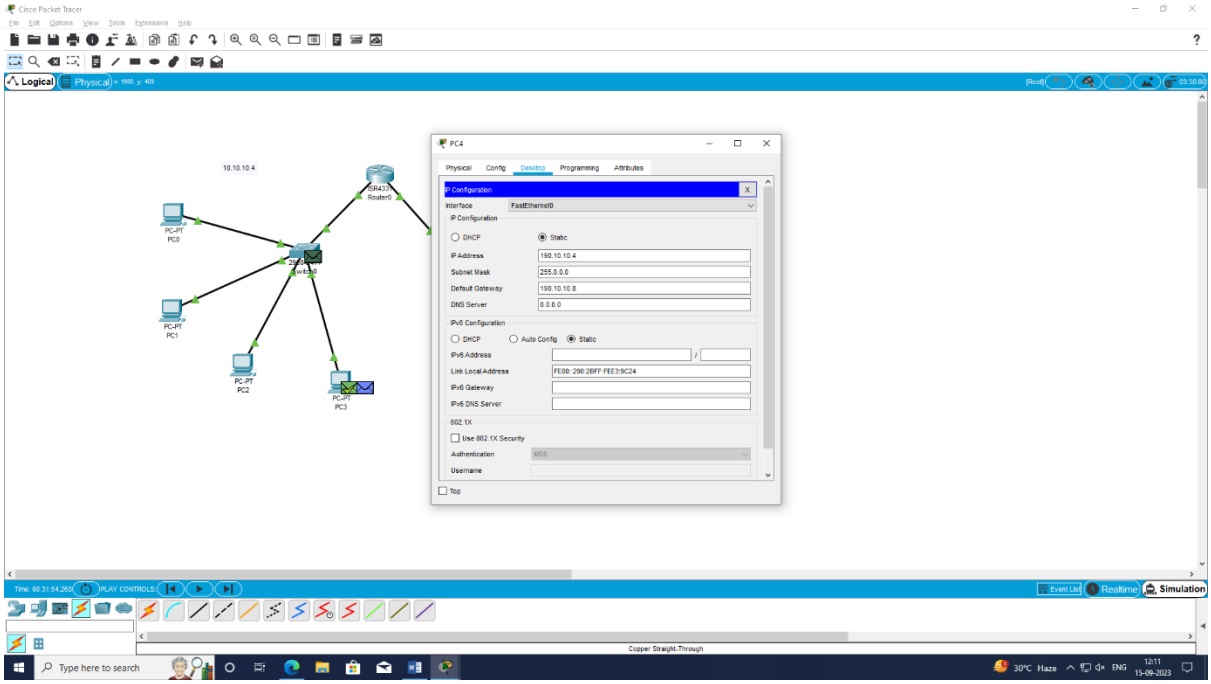
Step 6: Assign the default gateway to all the PC's

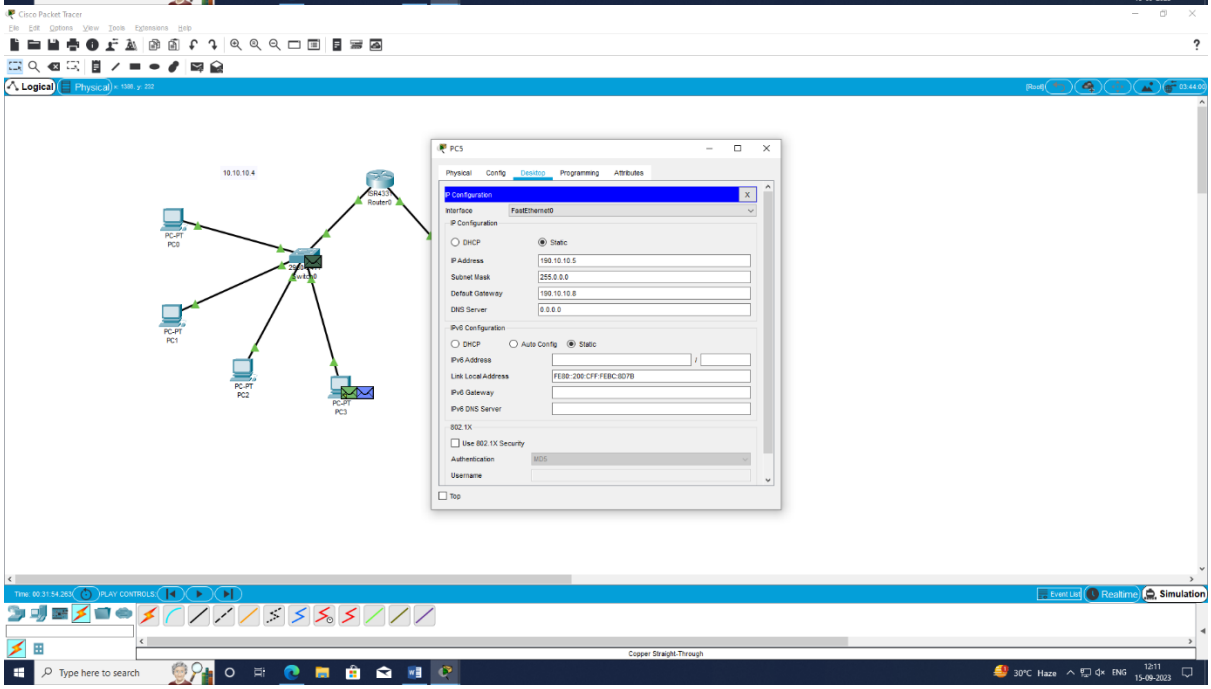


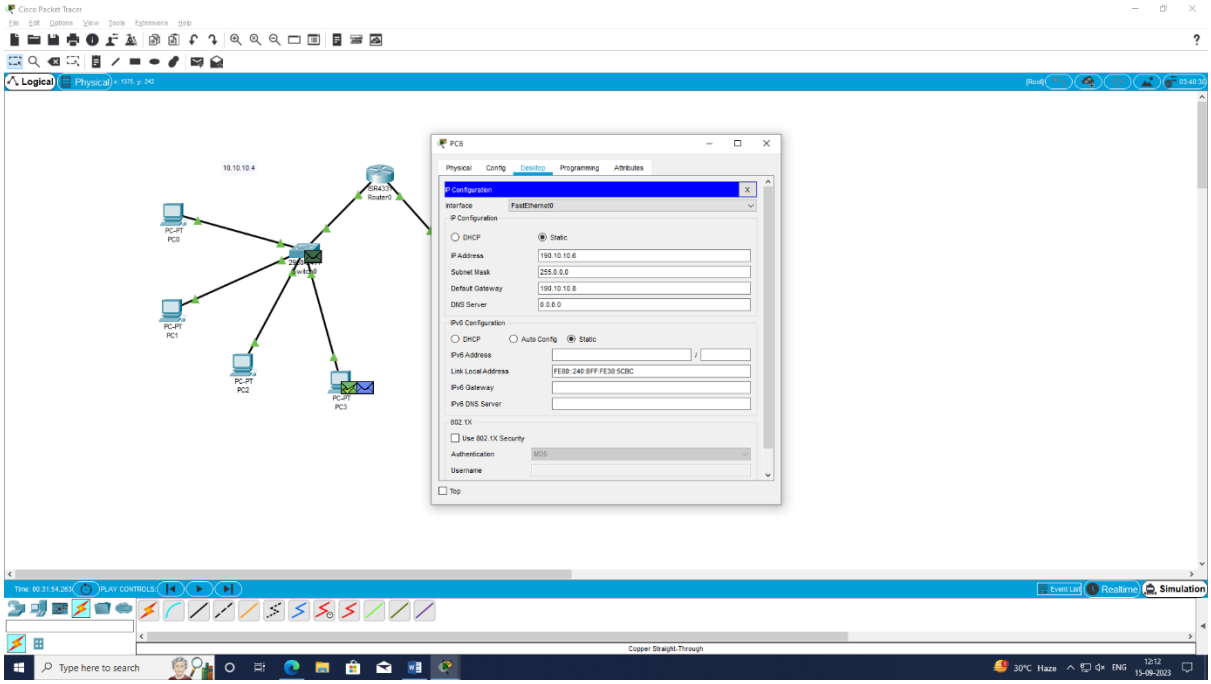


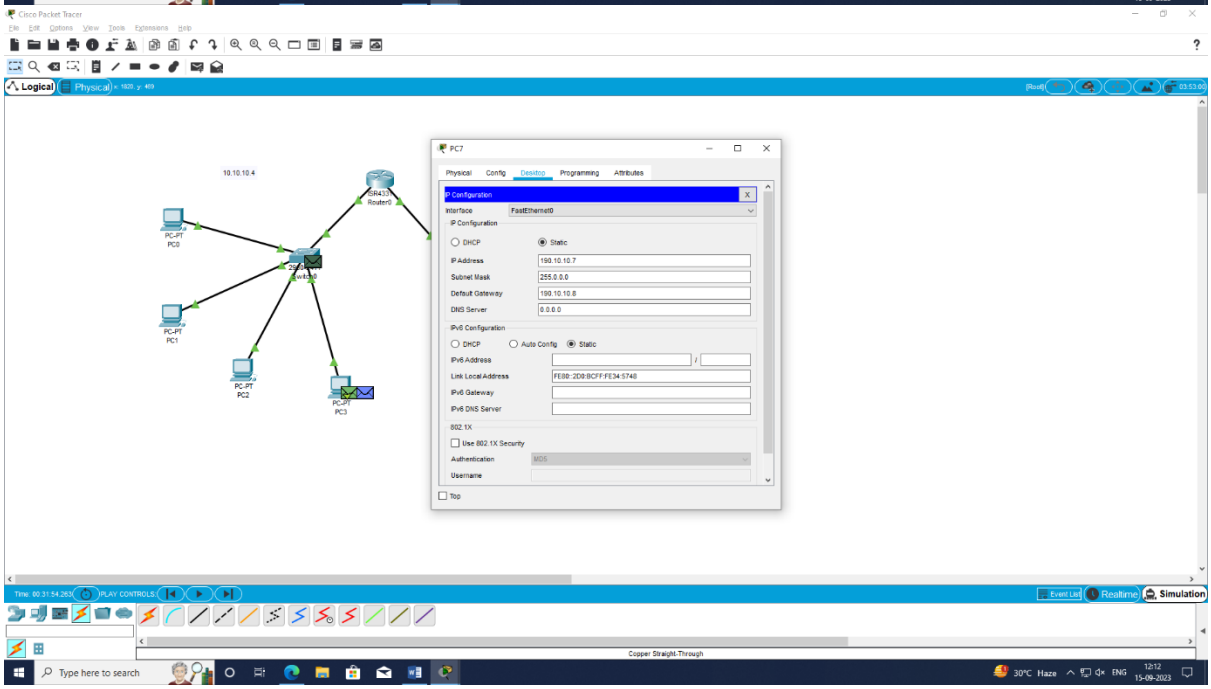

Cisco Packet Tracer
Logical
Physical
10.10.10.4
PC2
Physical
Config
Desktop
Programming
Attributes
IP Configuration
Interface
FastEthernet0
DHCP
Static
IP Address
10.10.10.2
Subnet Mask
255.0.0.0
Default Gateway
10.10.10.4
DNS Server
0.0.0.0
IPv6 Configuration
DHCP
Auto Config
Static
IPv6 Address
Link Local Address
FE80::2E0:8FFF:FE2B:5162
IPv6 Gateway
IPv6 DNS Server
802.1X
Use 802.1X Security
Authentication
MD5
Username
Top
PC-PT PC0
PC-PT PC1
PC-PT PC2
PC-PT PC3
Copper Straight-Through
Simulation
Realtime
Event List
Type here to search
30°C Haze
ENG
12:11
15-09-2023


Cisco Packet Tracer
Logical
Physical
10.10.10.4
190.10.10.8
PC3
Physical
Config
Desktop
Programming
Attributes
IP Configuration
Interface
FastEthernet0
DHCP
Static
IP Address
10.10.10.3
Subnet Mask
255.0.0.0
Default Gateway
10.10.10.4
DNS Server
0.0.0.0
IPv6 Configuration
DHCP
Auto Config
Static
IPv6 Address
Link Local Address
FE80::260:70FF:FEAD:47C5
IPv6 Gateway
IPv6 DNS Server
802.1X
Use 802.1X Security
Authentication
MD5
Username
Top
PC-PT PC0
PC-PT PC1
PC-PT PC2
PC-PT PC3
PC-PT PC4
PC-PT PC5
Copper Straight-Through
Simulation
Realtime
Event List
Type here to search
30°C Haze
ENG
12:11
15-09-2023

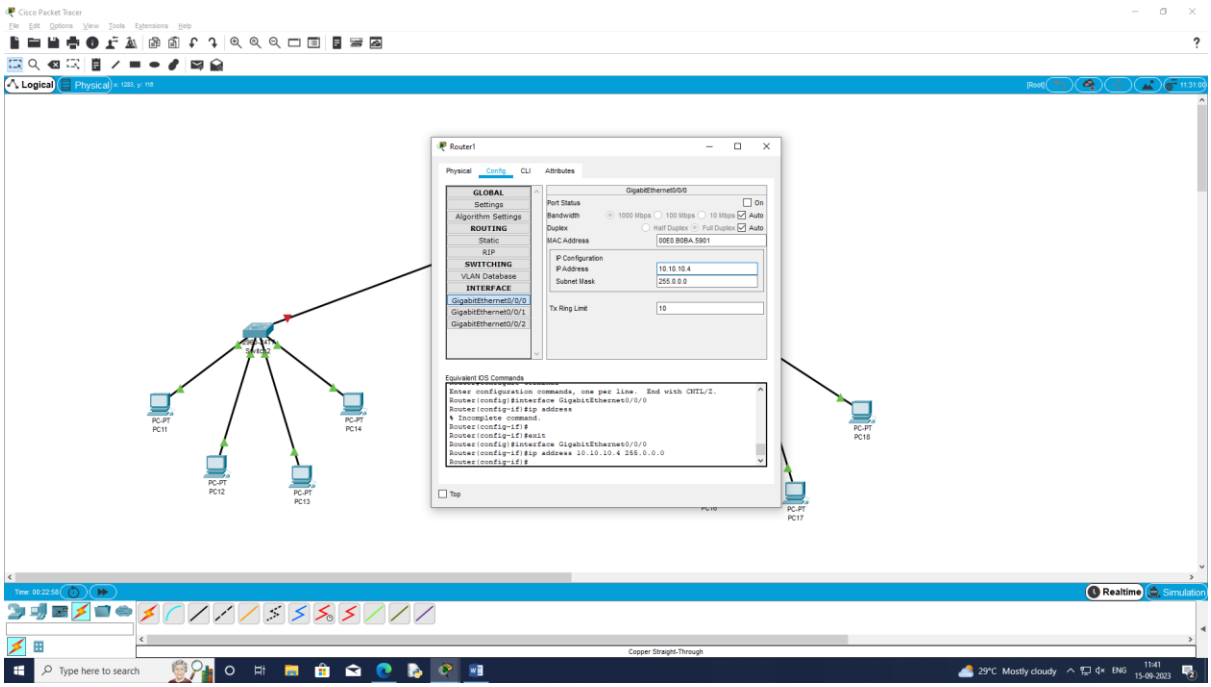

Cisco Packet Tracer
Logical
Physical
10.10.10.4
PC4
Physical
Config
Desktop
Programming
Attributes
IP Configuration
Interface
FastEthernet0
DHCP
Static
IP Address
190.10.10.4
Subnet Mask
255.0.0.0
Default Gateway
190.10.10.8
DNS Server
0.0.0.0
IPv6 Configuration
IPv6 Address
Link Local Address
FE80::290:2BFF:FEE3:9C24
IPv6 Gateway
IPv6 DNS Server
802.1X
Use 802.1X Security
Authentication
MD5
Username
Top
PC-PT PC0
PC-PT PC1
PC-PT PC2
PC-PT PC3
Copper Straight-Through
Realtime
Simulation
Type here to search
30°C Haze
ENG
12:11
15-09-2023

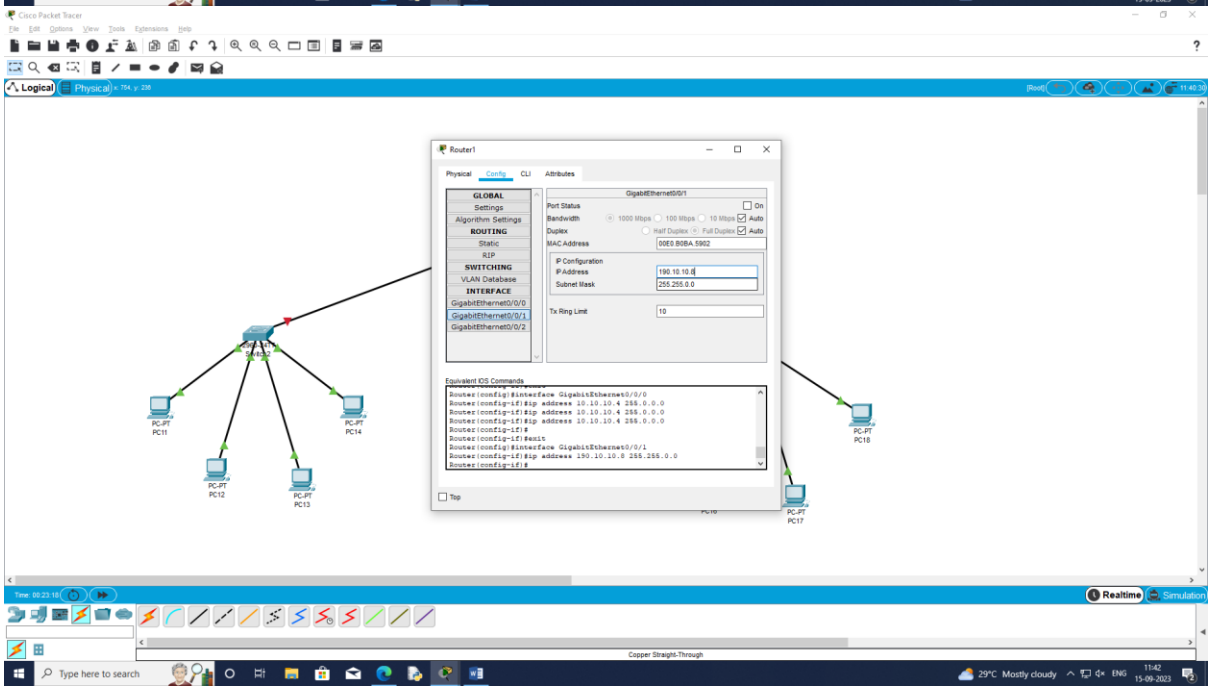

Cisco Packet Tracer
Logical
Physical
10.10.10.4
PC5
Physical
Config
Desktop
Programming
Attributes
IP Configuration
Interface
FastEthernet0
DHCP
Static
IP Address
190.10.10.5
Subnet Mask
255.0.0.0
Default Gateway
190.10.10.8
DNS Server
0.0.0.0
IPv6 Configuration
IPv6 Address
Link Local Address
FE80::200:CFF:FEBC:8D7B
IPv6 Gateway
IPv6 DNS Server
802.1X
Use 802.1X Security
Authentication
MD5
Username
Top
PC-PT PC0
PC-PT PC1
PC-PT PC2
PC-PT PC3
Copper Straight-Through
Realtime
Simulation
Type here to search
30°C Haze
ENG
12:11
15-09-2023


Cisco Packet Tracer
Logical
Physical
10.10.10.4
PC-PT PC0
PC-PT PC1
PC-PT PC2
PC-PT PC3
PC6
Physical
Config
Desktop
Programming
Attributes
IP Configuration
Interface
FastEthernet0
DHCP
Static
IP Address
190.10.10.6
Subnet Mask
255.0.0.0
Default Gateway
190.10.10.8
DNS Server
0.0.0.0
IPv6 Configuration
DHCP
Auto Config
Static
IPv6 Address
Link Local Address
FE80::240:BFF:FE38:5CBC
IPv6 Gateway
IPv6 DNS Server
802.1X
Use 802.1X Security
Authentication
MD5
Username
Top
Copper Straight-Through
Realtime
Simulation
Type here to search
30°C Haze
ENG
12:12
15-09-2023

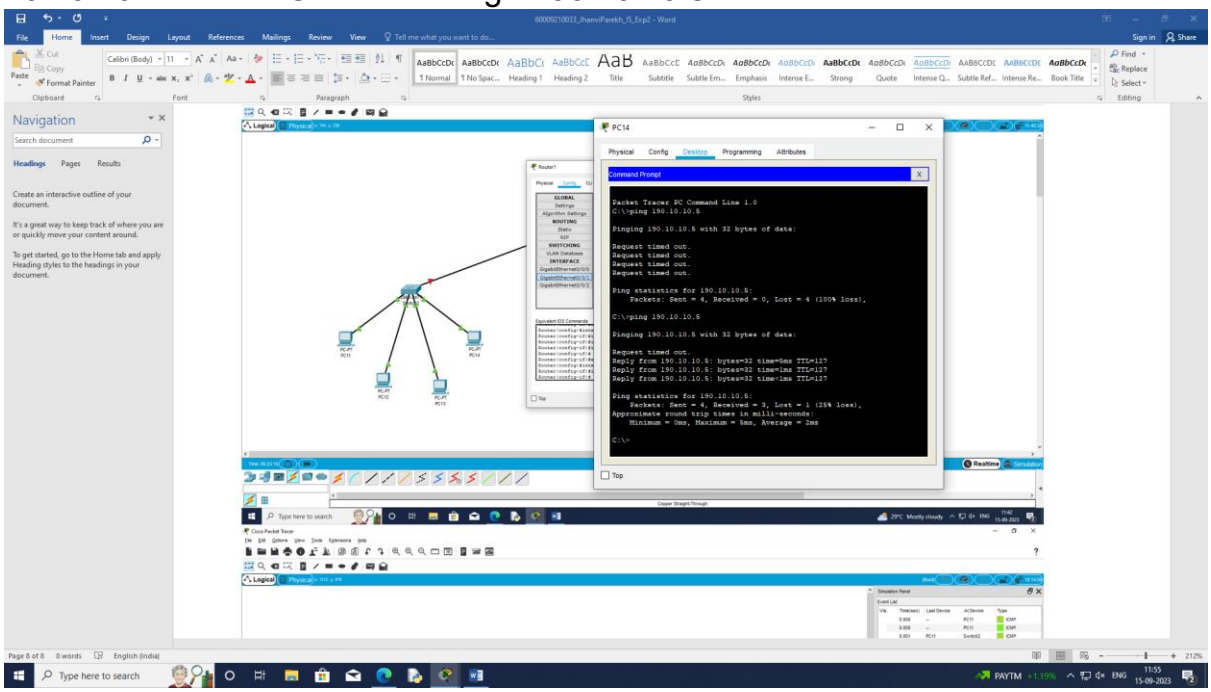

Cisco Packet Tracer
Logical
Physical
10.10.10.4
PC-PT PC0
PC-PT PC1
PC-PT PC2
PC-PT PC3
PC7
Physical
Config
Desktop
Programming
Attributes
IP Configuration
Interface
FastEthernet0
DHCP
Static
IP Address
190.10.10.7
Subnet Mask
255.0.0.0
Default Gateway
190.10.10.8
DNS Server
0.0.0.0
IPv6 Configuration
DHCP
Auto Config
Static
IPv6 Address
Link Local Address
FE80::2D9:BCFF:FE34:5748
IPv6 Gateway
IPv6 DNS Server
802.1X
Use 802.1X Security
Authentication
MD5
Username
Top
Copper Straight-Through
Realtime
Simulation
Type here to search
30°C Haze
ENG
12:12
15-09-2023

Step 7: Assign the IP address to the port of the router in the range of the default gateway of the respective PC’s.

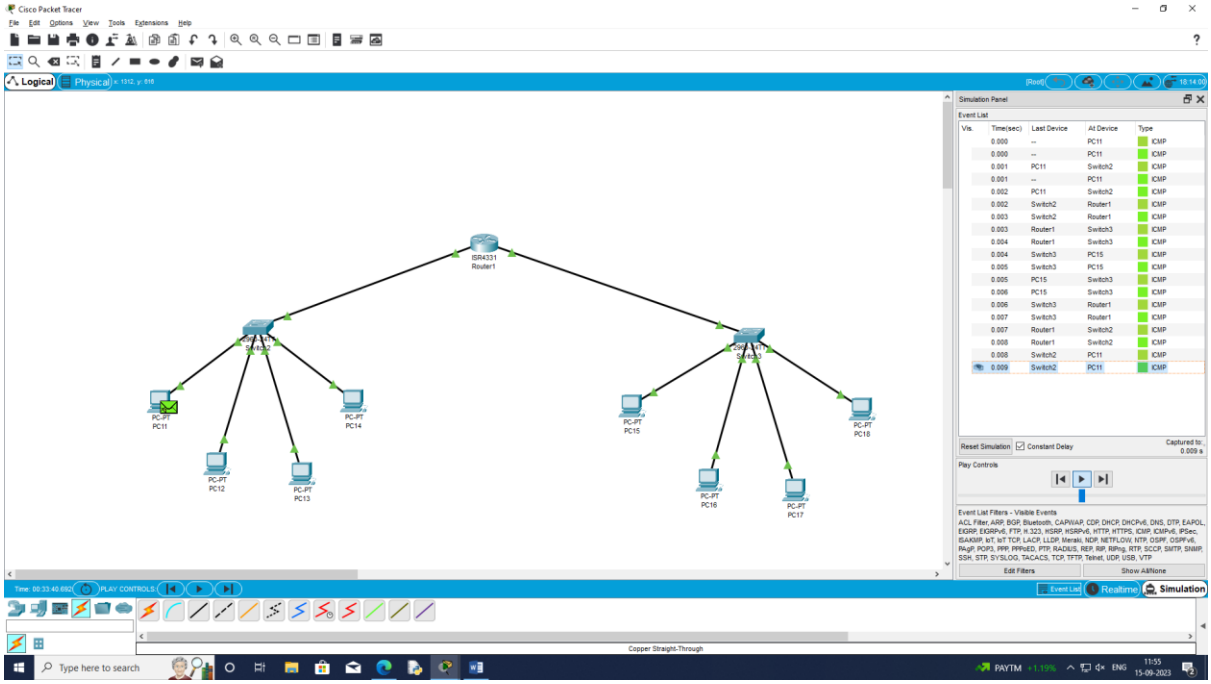




Step 8: Ping the message in the command prompt of anyone PC's of a range 10.10.10.4 to the PC's of the range 190.10.10.8.

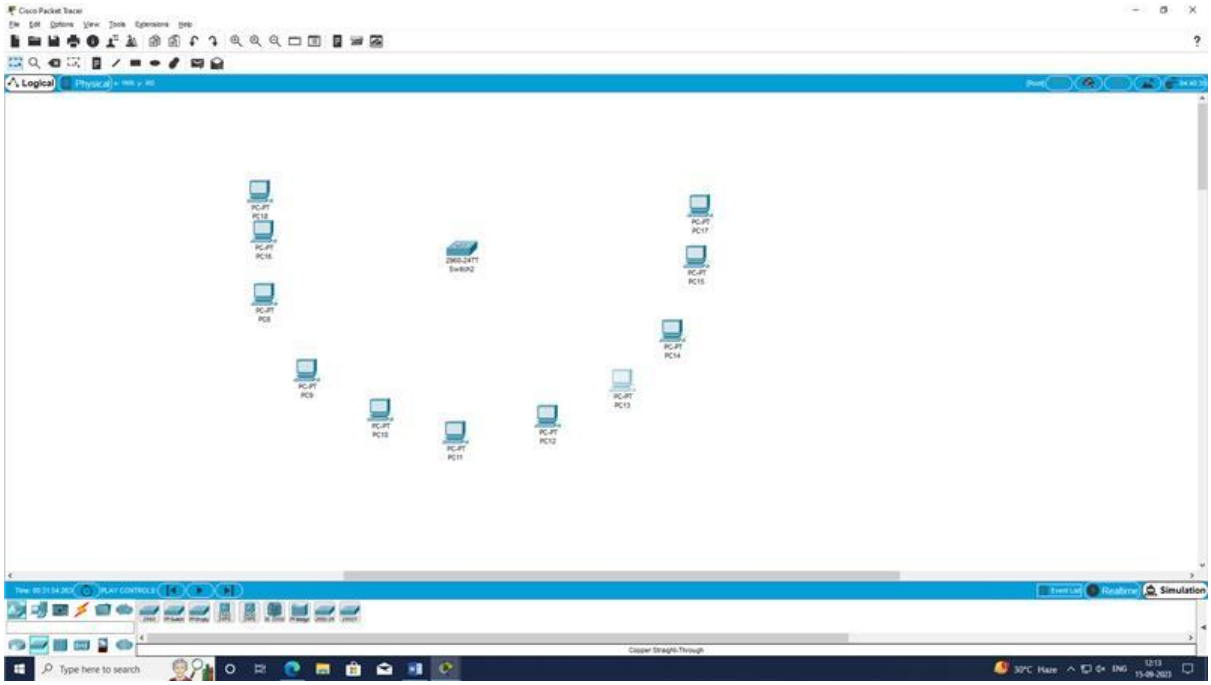


Step 9: Stimulation Movement.

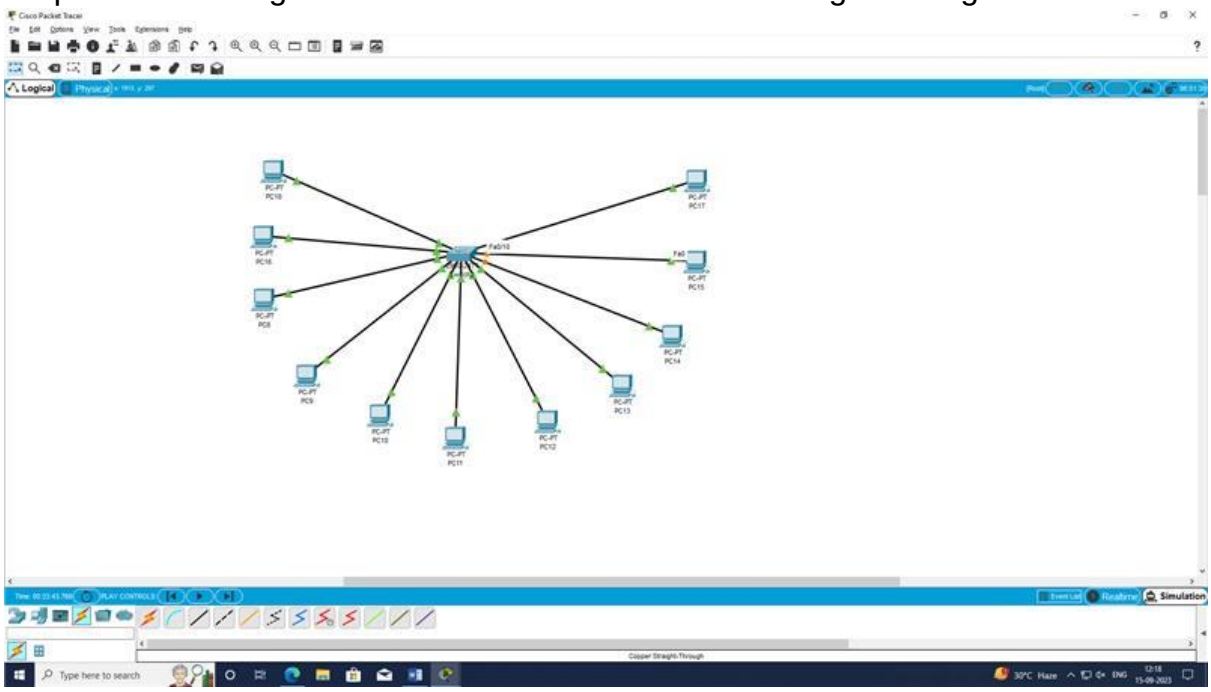


SWITCH

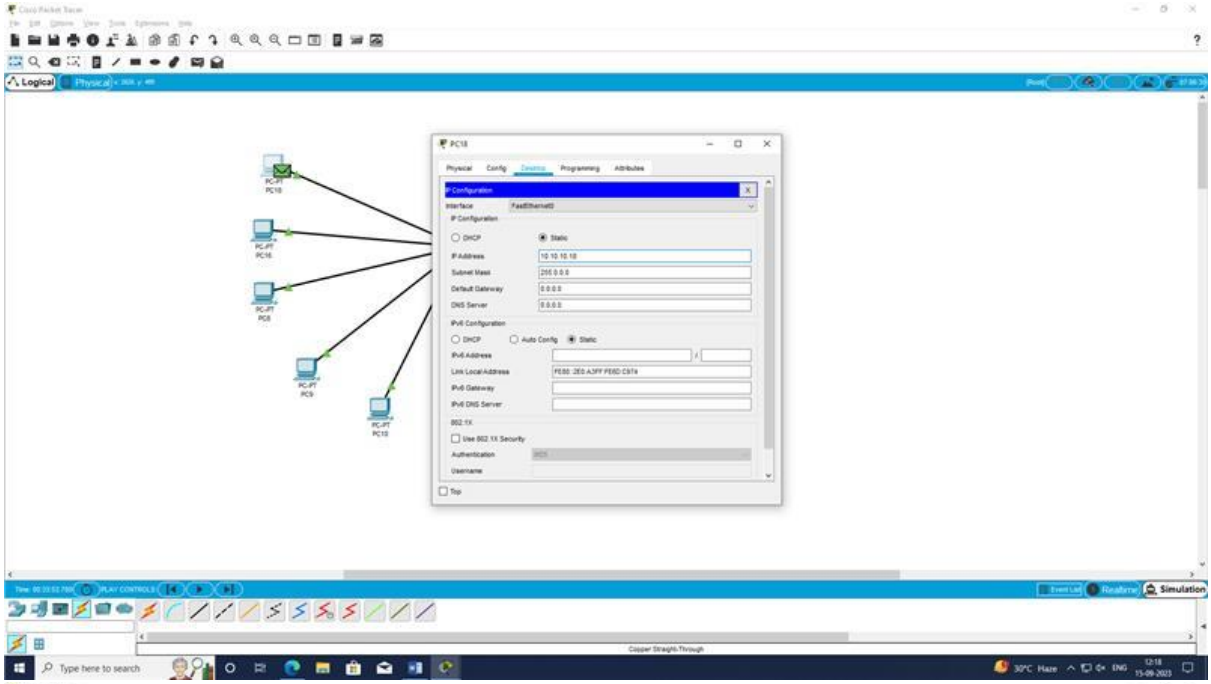
Step 1: Selecting 11 PC’s and a switch.

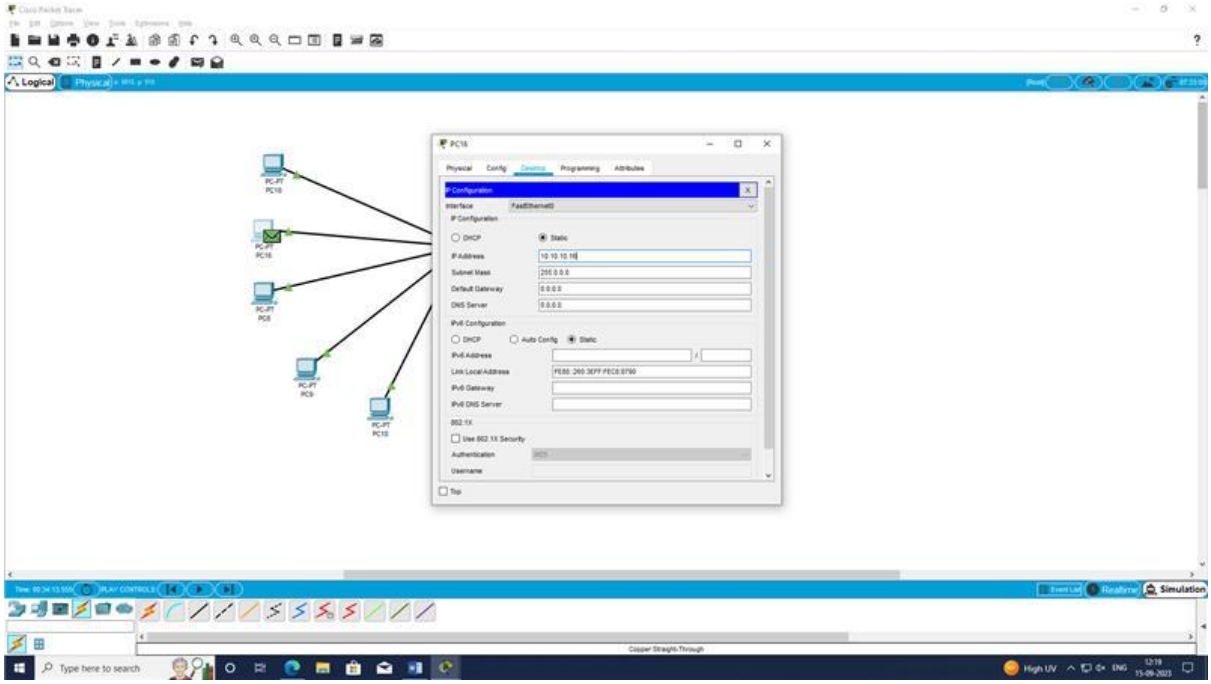


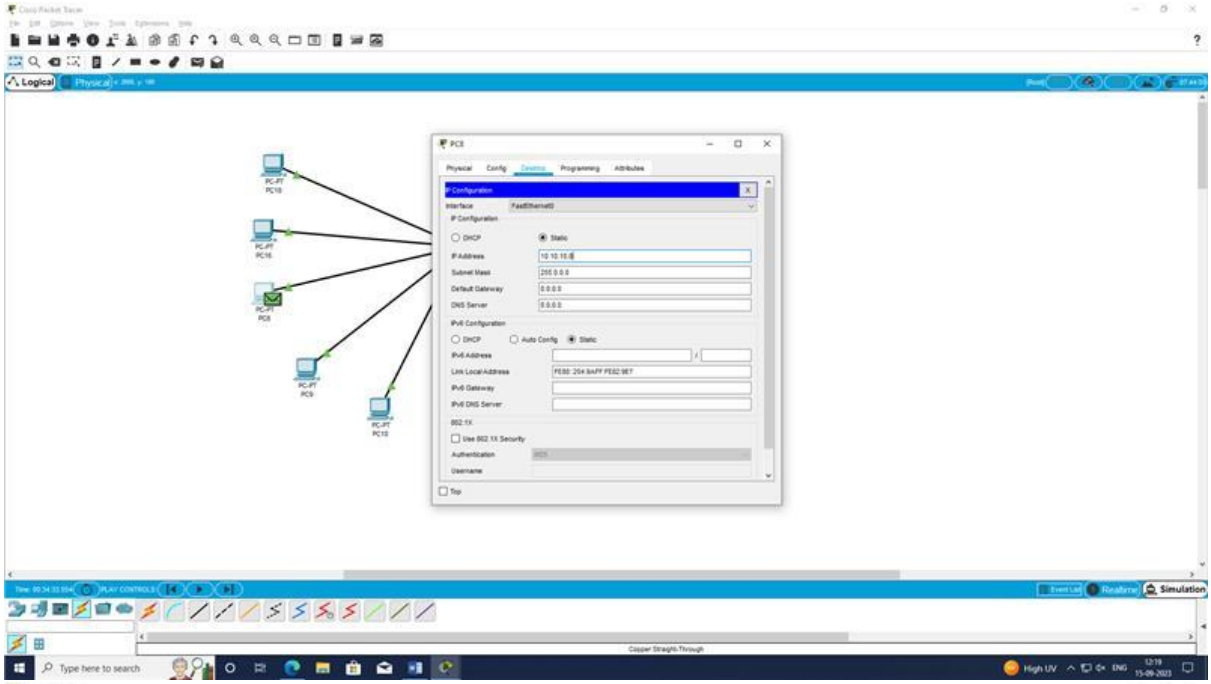
Step 2: Connecting all the PC’s to the switch with a straight through cable.

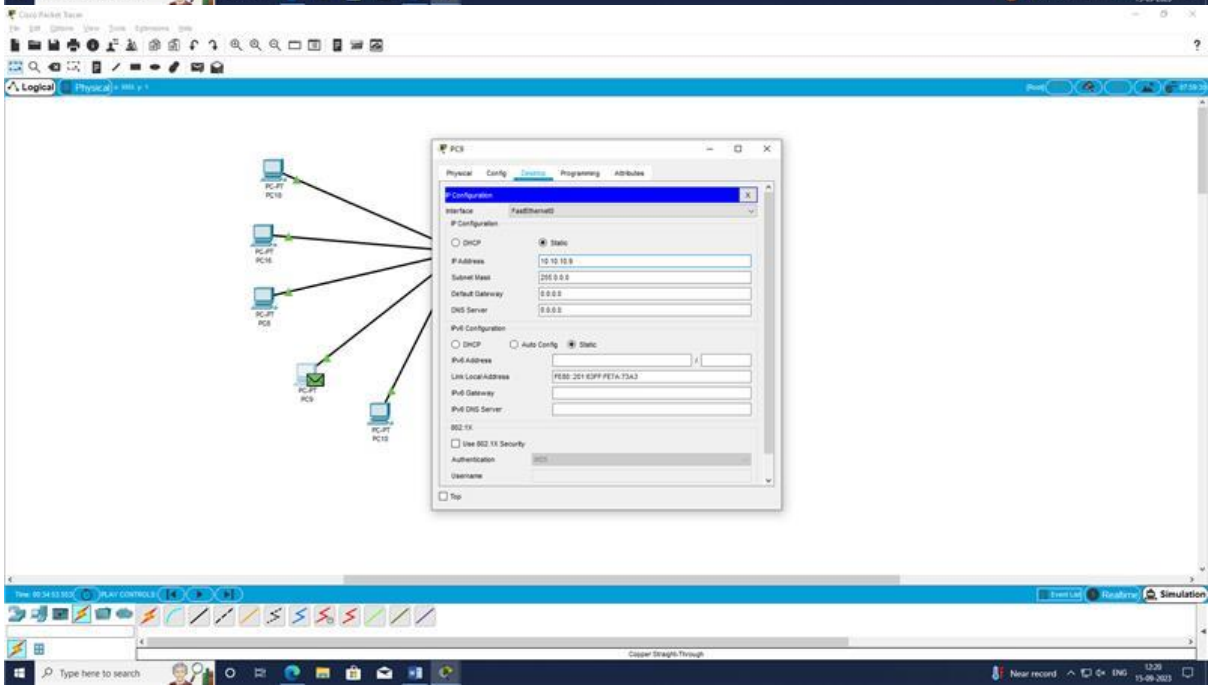


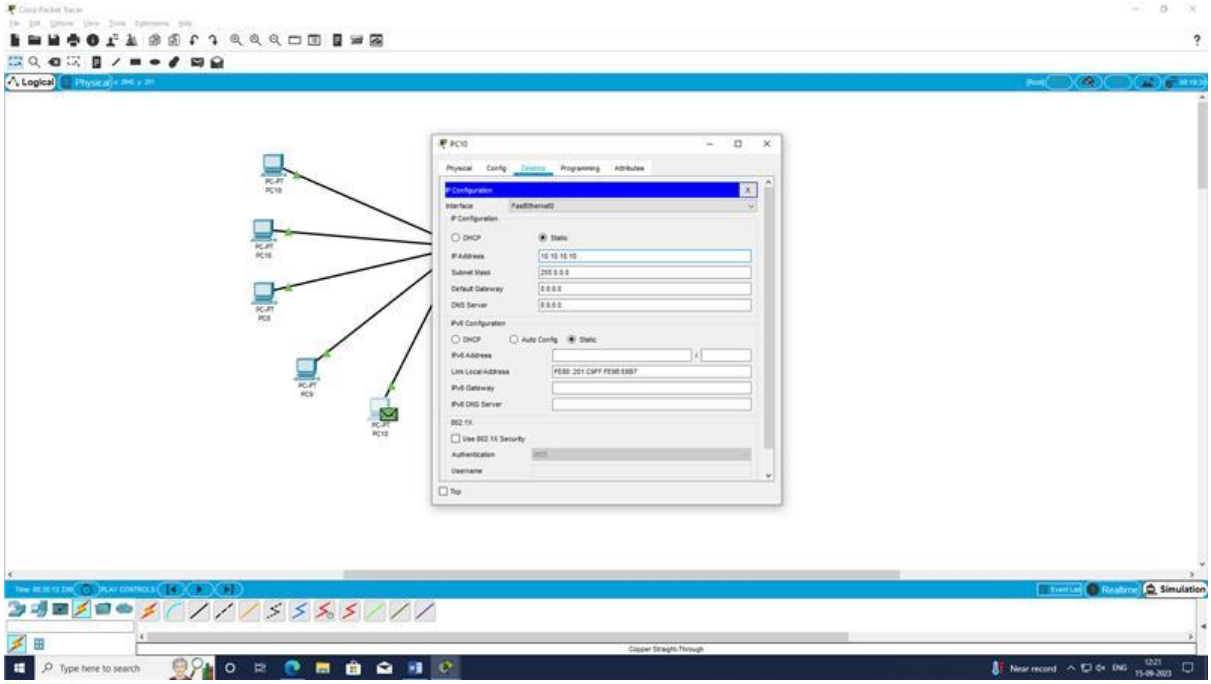
Step 3: Giving IP address to all the 11 PC’s.

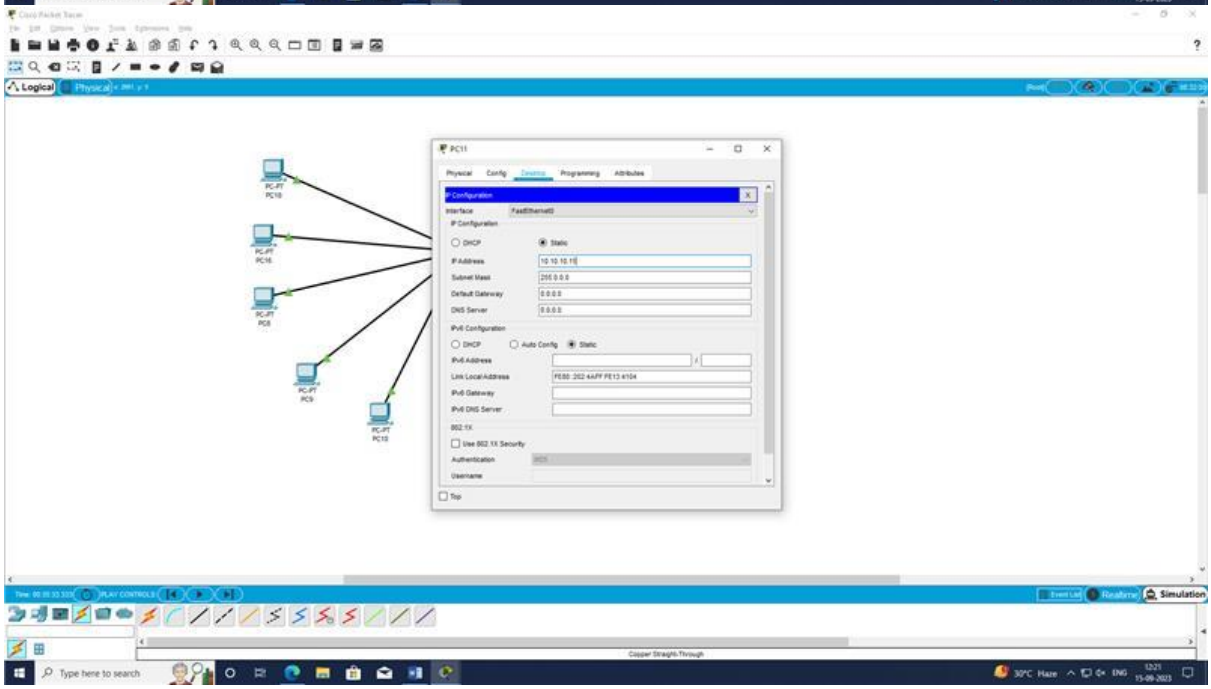


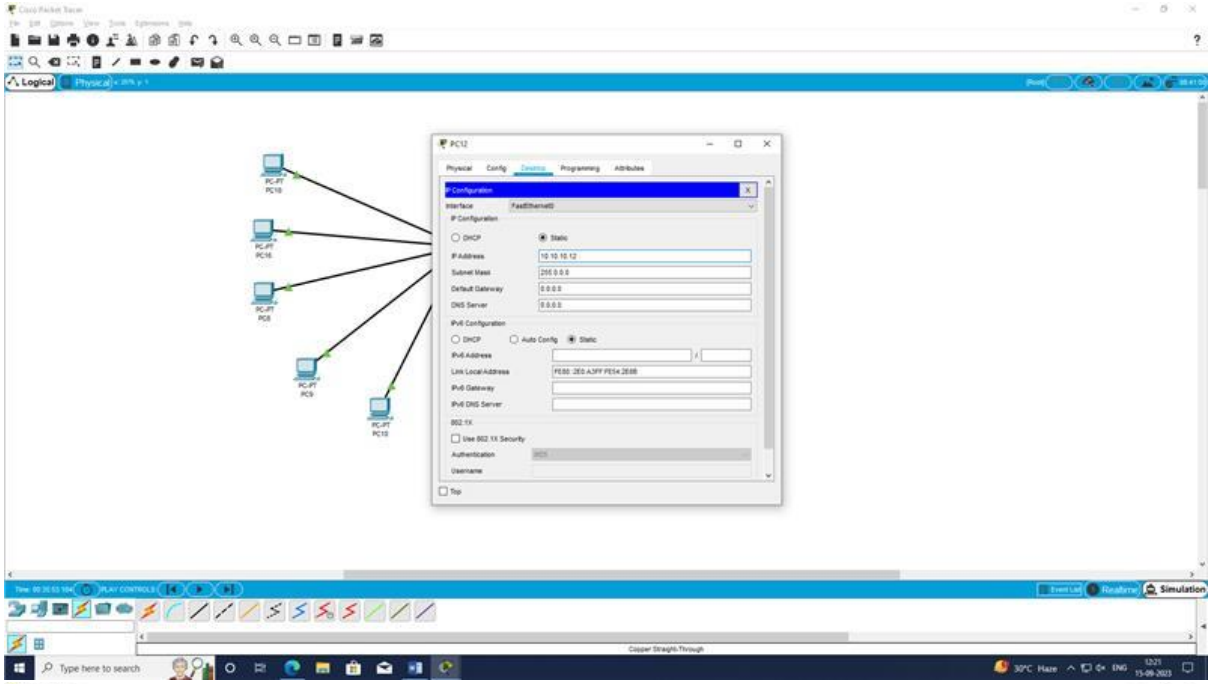


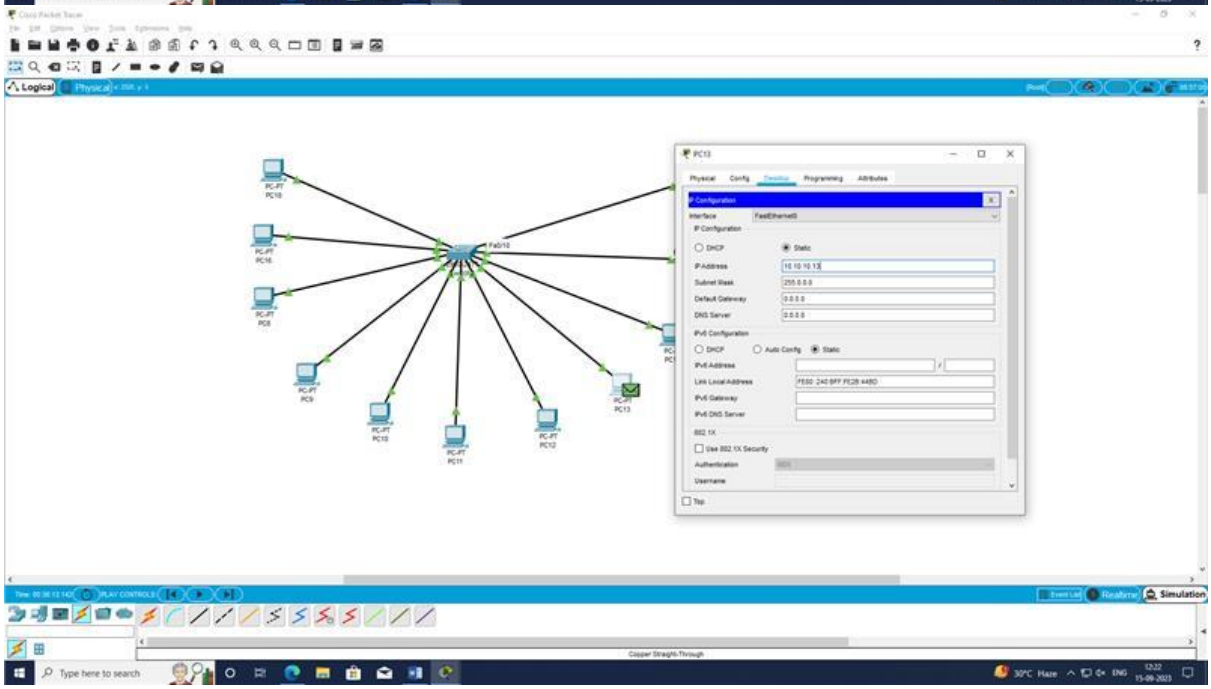

Logical
PC8
Physical
Config
Desktop
Programming
Attributes
IP Configuration
Interface
FastEthernet0
DHCP
Static
IP Address
10.10.10.8
Subnet Mask
255.0.0.0
Default Gateway
0.0.0.0
DNS Server
IPv6 Configuration
IPv6 Address
Link Local Address
IPv6 Gateway
IPv6 DNS Server
802.1X
Use 802.1X Security
Authentication
Username
Top
Simulation
Copper Straight-Through
Type here to search

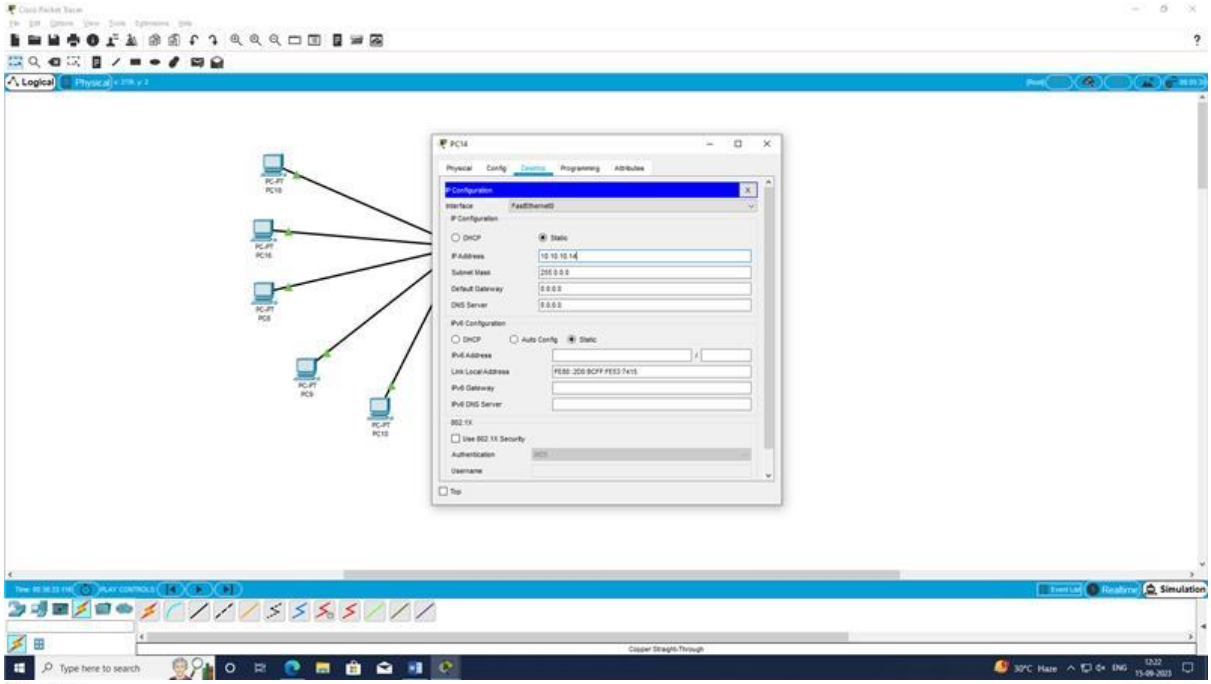

Logical
PC8
Physical
Config
Desktop
Programming
Attributes
IP Configuration
Interface
FastEthernet0
DHCP
Static
IP Address
10.10.10.9
Subnet Mask
255.0.0.0
Default Gateway
0.0.0.0
DNS Server
IPv6 Configuration
IPv6 Address
Link Local Address
IPv6 Gateway
IPv6 DNS Server
802.1X
Use 802.1X Security
Authentication
Username
Top
Simulation
Copper Straight-Through
Type here to search

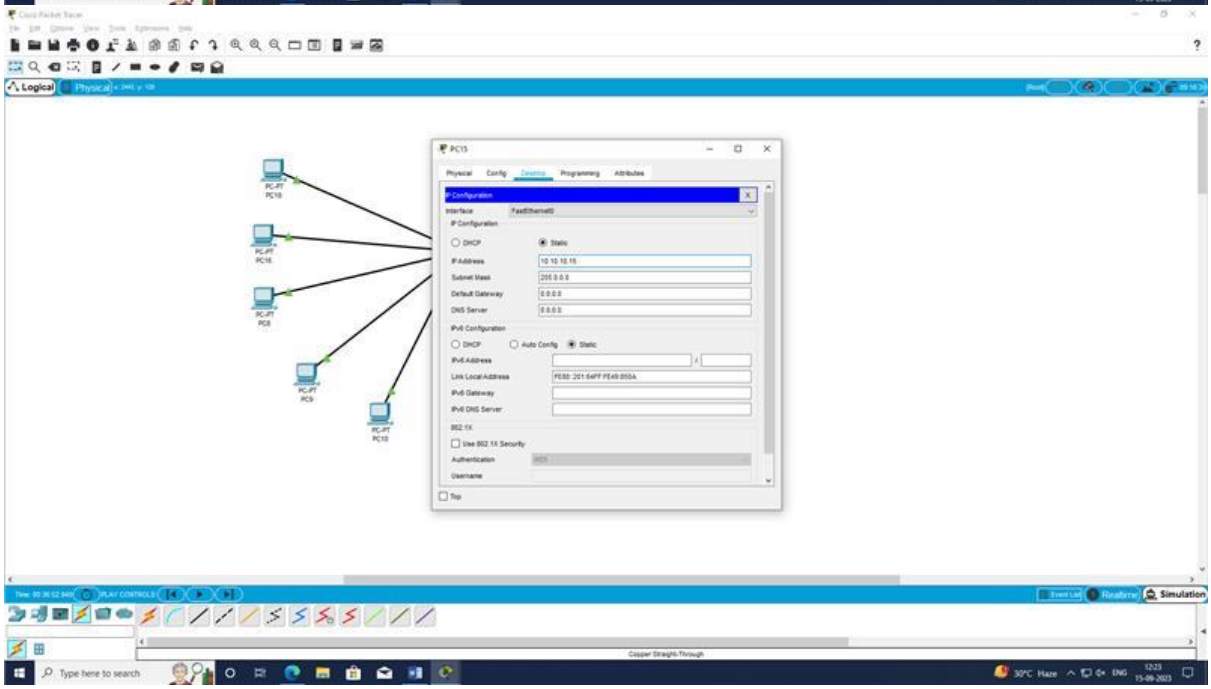

PC10
Physical
Config
Desktop
Programming
Attributes
IP Configuration
Interface
FastEthernet0
DHCP
Static
IP Address
10.10.10.10
Subnet Mask
255.0.0.0
Default Gateway
0.0.0.0
DNS Server
IPv6 Configuration
IPv6 Address
Link Local Address
IPv6 Gateway
IPv6 DNS Server
802.1X
Use 802.1X Security
Authentication
Username
Top
PC-PT PC10
PC-PT PC11
PC-PT PC8
PC-PT PC9

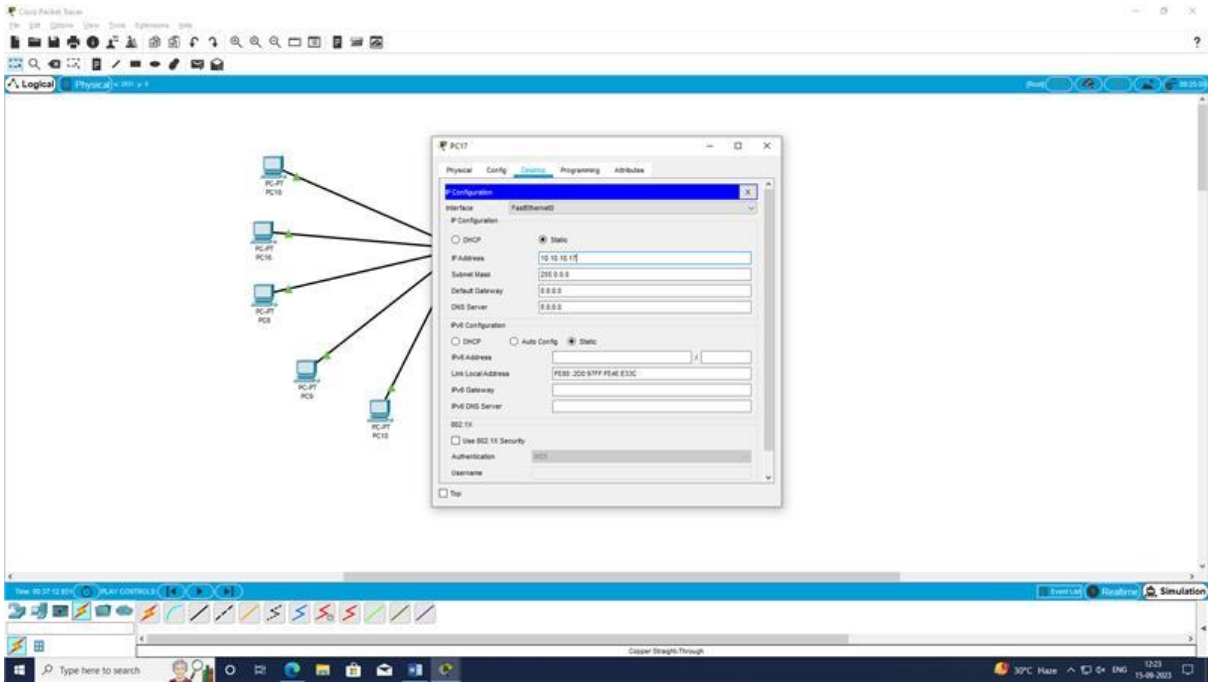

PC11
Physical
Config
Desktop
Programming
Attributes
IP Configuration
Interface
FastEthernet0
DHCP
Static
IP Address
10.10.10.11
Subnet Mask
255.0.0.0
Default Gateway
0.0.0.0
DNS Server
IPv6 Configuration
IPv6 Address
Link Local Address
IPv6 Gateway
IPv6 DNS Server
802.1X
Use 802.1X Security
Authentication
Username
Top
PC-PT PC10
PC-PT PC11
PC-PT PC8
PC-PT PC9


PC12
Physical
Config
Desktop
Programming
Attributes
IP Configuration
Interface
FastEthernet0
DHCP
Static
IP Address
10.10.10.12
Subnet Mask
255.0.0.0
Default Gateway
DNS Server
IPv6 Configuration
Auto Config
IPv6 Address
Link Local Address
IPv6 Gateway
IPv6 DNS Server
802.1X
Use 802.1X Security
Authentication
Username
Top
PC-PT PC10
PC-PT PC16
PC-PT PC8
PC-PT PC9
PC-PT PC11
Logical
Physical
Simulation
Realtime
Copper Straight-Through
Type here to search
30°C Haze
ENG
12:21
15-09-2023

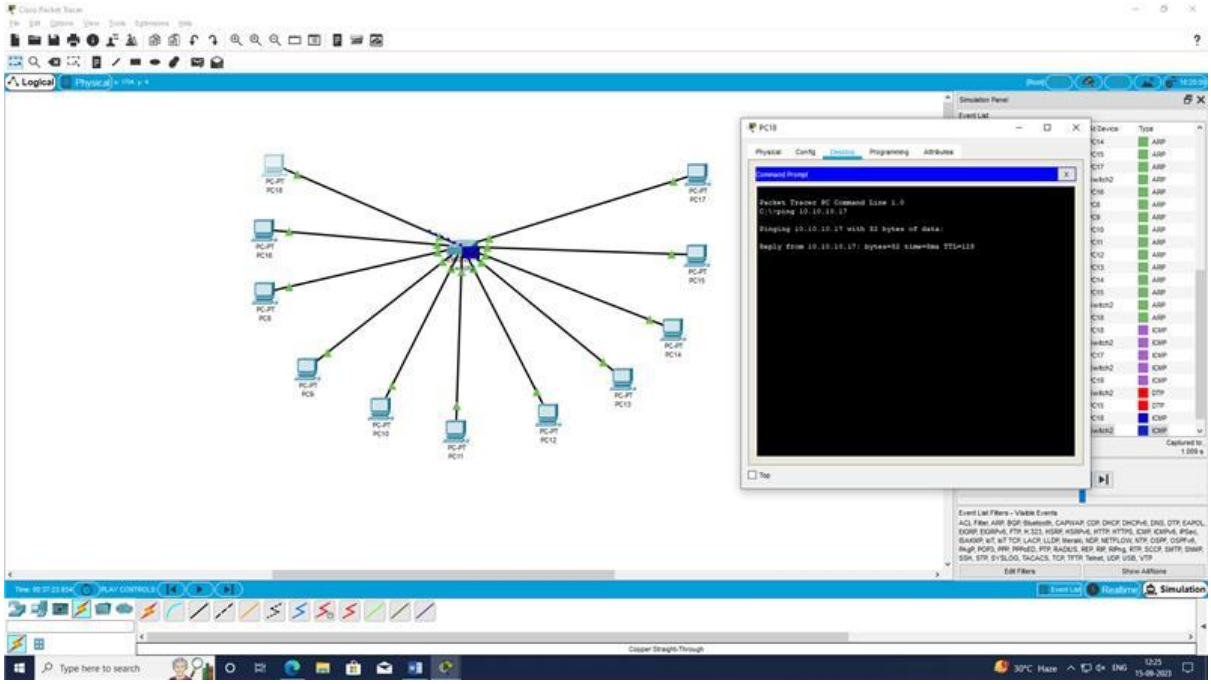
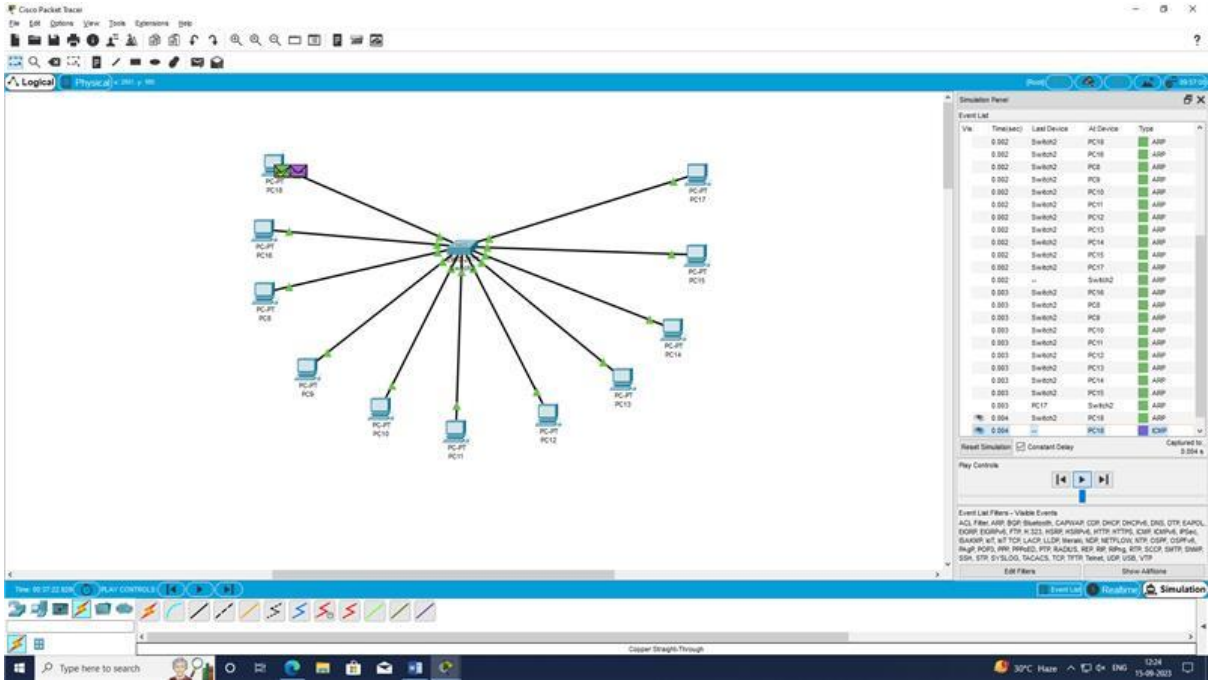

PC13
Physical
Config
Desktop
Programming
Attributes
IP Configuration
Interface
FastEthernet0
DHCP
Static
IP Address
10.10.10.13
Subnet Mask
255.0.0.0
Default Gateway
DNS Server
IPv6 Configuration
Auto Config
IPv6 Address
Link Local Address
IPv6 Gateway
IPv6 DNS Server
802.1X
Use 802.1X Security
Authentication
Username
Top
Fa0/10
PC-PT PC10
PC-PT PC16
PC-PT PC8
PC-PT PC9
PC-PT PC10
PC-PT PC11
PC-PT PC12
PC-PT PC13
Logical
Physical
Simulation
Realtime
Copper Straight-Through
Type here to search
30°C Haze
ENG
12:22
15-09-2023


Logical
PC14
Physical
Config
Desktop
Programming
Attributes
IP Configuration
Interface
FastEthernet0
DHCP
Static
IP Address
10.10.10.14
Subnet Mask
255.0.0.0
Default Gateway
0.0.0.0
DNS Server
IPv6 Configuration
Auto Config
IPv6 Address
Link Local Address
IPv6 Gateway
IPv6 DNS Server
802.1X
Use 802.1X Security
Authentication
Username
Top
PC-PT PC10
PC-PT PC16
PC-PT PC8
PC-PT PC9
PC-PT PC15
Simulation
Copper Straight-Through
Type here to search
30°C Haze
ENG
12:22
15-09-2023


Logical
PC15
Physical
Config
Desktop
Programming
Attributes
IP Configuration
Interface
FastEthernet0
DHCP
Static
IP Address
10.10.10.15
Subnet Mask
255.0.0.0
Default Gateway
0.0.0.0
DNS Server
IPv6 Configuration
Auto Config
IPv6 Address
Link Local Address
IPv6 Gateway
IPv6 DNS Server
802.1X
Use 802.1X Security
Authentication
Username
Top
PC-PT PC10
PC-PT PC16
PC-PT PC8
PC-PT PC9
PC-PT PC15
Simulation
Copper Straight-Through
Type here to search
30°C Haze
ENG
12:23
15-09-2023


Logical
PC17
Physical
Config
Desktop
Programming
Attributes
IP Configuration
Interface
FastEthernet0
DHCP
Static
IP Address
10.10.10.17
Subnet Mask
255.0.0.0
Default Gateway
0.0.0.0
DNS Server
0.0.0.0
IPv6 Configuration
Auto Config
IPv6 Address
Link Local Address
IPv6 Gateway
IPv6 DNS Server
802.1X
Use 802.1X Security
Authentication
Username
Top
PC-PT PC10
PC-PT PC16
PC-PT PC8
PC-PT PC9
PC-PT PC15
Simulation
Copper Straight-Through
Type here to search
30°C Haze
ENG
12:23
15-09-2023

Step 4: Ping the message in the command from any one PC to another.



Step 5: Sending message from one PC to another. Taking readings of the Stimulations.