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Section : 5B

Modes of router

```
        --- System Configuration Dialog ---

Continue with configuration dialog? [yes/no]: no

Press RETURN to get started!


Router>enable
Router#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#interface fa0/1
%Invalid interface type and number
Router(config)#
```

CHANGING HOSTNAME

```
Router(config)#hostname ABD
ABD(config)#exit
ABD#
%SYS-5-CONFIG_I: Configured from console by console
```

Time

```
ABD#
ABD#clock set ?
  hh:mm:ss  Current Time
ABD#clock set ?
  hh:mm:ss  Current Time
ABD#clock set 02:19:34 8 May 2021
ABD#show clock
*2:19:38.481 UTC Sat May 8 2021
ABD#
```

Copy   Paste

Banner

```
ABD(config)#banner motd # welcome to Networking #
```

```
ABD con0 is now available



Press RETURN to get started.




  welcome to Networking
```

DISPLAYING RUNNING-CONFIGURATION

```
enable
ABD#show running-config
Building configuration...

Current configuration : 441 bytes
!
version 12.2
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname ABD
!
!
!
!
!
!
!
!
ip cef
no ipv6 cef
!
!
 --More--
```

Password

```
ABD#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
ABD(config)#line console 0
ABD(config-line)#passward 4321
                         ^
% Invalid input detected at '^' marker.

ABD(config-line)#password 4321
ABD(config-line)#login
ABD(config-line)#end
ABD#
%SYS-5-CONFIG_I: Configured from console by console
```

```
Press RETURN to get started!

 welcome to Networking

User Access Verification

Password:

ABD>
```

Secret password

```
ABD>enable
ABD#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
ABD(config)#enable?
enable
ABD(config)#enable
% Incomplete command.
ABD(config)#enable?
enable
ABD(config)#enableenable?
% Unrecognized command
ABD(config)#enable?
enable
ABD(config)#enable?
enable
ABD(config)#enable?
enable
ABD(config)#enablenable secret abcd
                   ^
% Invalid input detected at '^' marker.

ABD(config)#enable secret abcd
ABD(config)#exit
ABD#
%SYS-5-CONFIG_I: Configured from console by console
enable
ABD#show running-config
Building configuration...

Current configuration : 512 bytes
!
version 12.2
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname ABD
!
!
!
enable secret 5 $1$mERr$YcSt/sTClKuDWnwopttUQ.
!
!
!
!
!
!
ip cef
no ipv6 cef
 --More--
```

What is telnet?

Telnet is a network protocol used to virtually access a computer and to provide a two-way,

Collaborative and text-based communication channel between two machines. It follows a user

Command Transmission Control Protocol/Internet Protocol (TCP/IP) networking protocol for

Creating remote sessions.

How to telnet?

Typing telnet hostname would connect a user to a hostname named

Hostname. Telnet enables a user to manage an account or device remotely. For example, a user

May telnet into a computer that hosts their website to manage his or her files remotely.

Line VTY/telnet password

```
ABD#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
ABD(config)#vty 0 4
              ^
% Invalid input detected at '^' marker.

ABD(config)#line vty 0 4
ABD(config-line)#password 4321
ABD(config-line)#login
ABD(config-line)#exit
ABD(config)#exit
ABD#
%SYS-5-CONFIG_I: Configured from console by console
```

Uses of router in different topologies?

Star topology for wireless networks

The most obvious example of this would be a home network. All of the nodes – phones, printers, tablets etc. – connect to the wireless access point (hub), which is usually both a router for the local network and a bridge to the Internet. Star networks are highly suitable for connecting both wired and wireless nodes together seamlessly.

Hybrid networks

Tree networks connect Star networks together on a Bus network. This is often used when there are several clusters of nodes such as in a WAN. In such a case, each node is connected to a router to form a Star network and then the routers will be connected together to create a Bus connection between them. This can also be done with a Snowflake network, which connects multiple Star networks to a single central node, like a Star of Stars.

Task 1
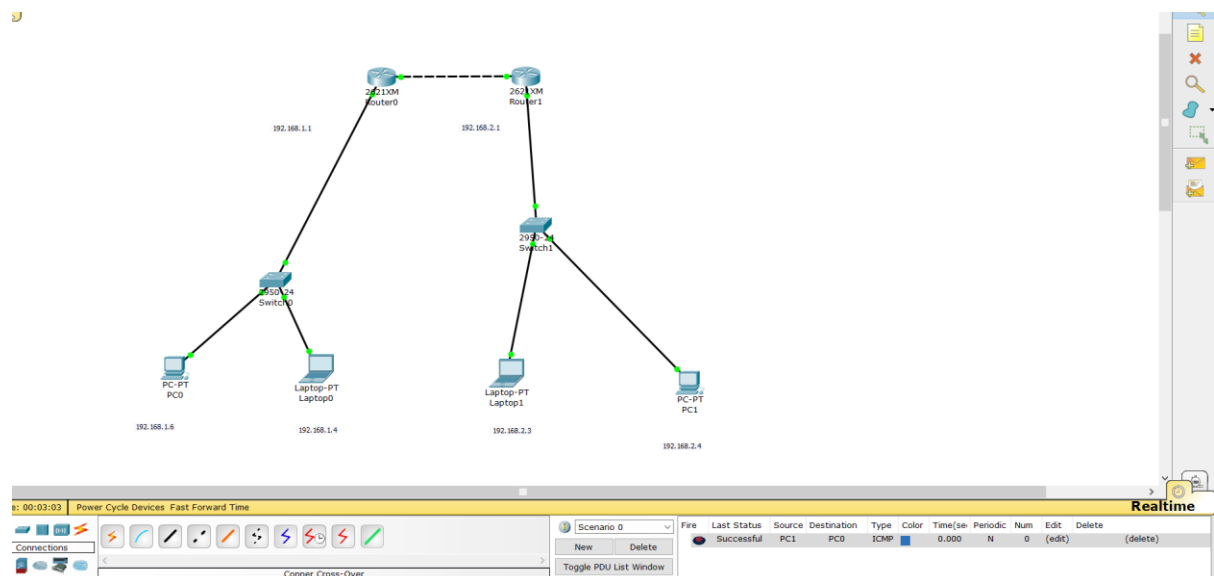
Modes

```
ABD#enable
ABD#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
ABD(config)#interface fa0/1
%Invalid interface type and number
ABD(config)#
```

Router SAR security

```
 welcome to Networking

User Access Verification

Password:

ABD>
```