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<b>Assignment No</b>	Five

### Assignment Number - 05

**Title :** Configuration of router by using rrip command

**Problem Statement** Using a Network Simulator (e.g. packet tracer) Configure routers for rip command

**Theory :**

**Router** – Router is a network device that allows you to direct data traffic to an appropriate destination. Router maintain routing table that contain IP addresses of computers over the network. A router has different components that enable proper functioning.

**Cisco IOS supports various command modes, among those followings are the main command modes.**

- User EXEC Mode
- Privileged EXEC Mode
- Global Configuration Mode
- Interface Configuration Mode
- Sub

Interce	Mode	Prompt	Command to enter	Command to exit
	User EXEC	Router >	Default mode after booting. Login	Use <b>exit</b> command
	Privileged EXEC	Router #	with passwoUse <b>enable</b> crommd, if caonnd fifrgoum userred. exec mode	Use <b>exit</b> command
	Global Configuration	Router(config)#	Use <b>configure terminal</b> command	Use <b>exit</b> command
	Interface Configuration	Router(configif)#	frUseom privile <b>interface</b> geed exec mode <b>type number</b> command from global configuration mode	Use <b>exit</b> command to return in global configuration
	Sub-Interface Configura*on	Router(configsubif)	Use <b>interface type sub</b> <b>interface</b> <b>number</b> command from global configuration mode	Use <b>exit</b> to return previous mode. Use <b>end</b> command to return in privileged

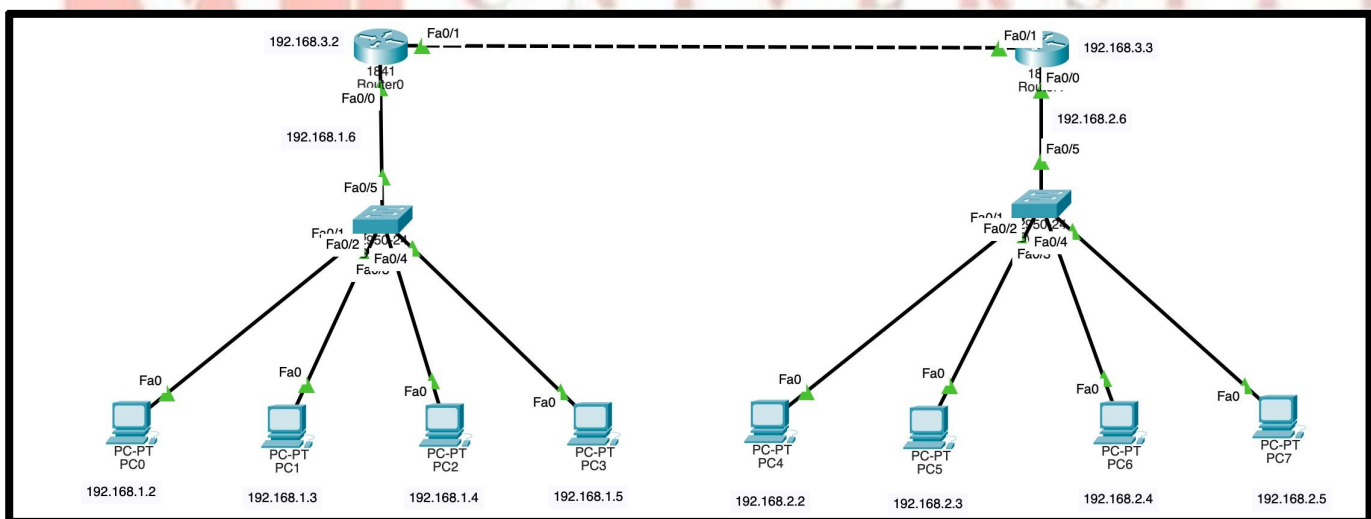
Configuration Mode • Setup Mode

or interface configure mode      exec mode.

### Some important router Command

Command	Description
Router(config)#interface serial 0/0/0	Enter into serial interface 0/0/0
Router(config- interface      Connecte to	Optional command. It set description on interface that is locally significant
Router(config-if)#ip address 10.0.0.1 255.0.0.0	Assigns address and subnet mask to
Router(config-if)#clock rate 64000	DCE side only command. Assigns a clock
Router(config-if)#bandwidth 64	DCE side only command. Set bandwidth for
Router(config-if)#no shutdown	Turns interface on

### Configuration of rip command:



Code:

### Router 0

```
Router(config-if)#
```

```
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
```

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up

Router(config-if)#exit

Router(config)#interface FastEthernet0/1

Router(config-if)#ip address 192.168.2.2 255.255.255.0

Router(config-if)#ip address 192.168.2.2 255.255.255.0

Router(config-if)#no shutdown

Router(config-if)#

%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up

Router(config-if)#

Router(config-if)#exit

Router(config)#router rip

Router(config-router)#network 192.168.1.0

Router(config-router)#network 192.168.3.0

### **Router 1**

Router>enable

Router#

Router#configure terminal

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

Router(config)#interface FastEthernet0/0

Router(config-if)#ip address 192.168.2.6 255.255.255.0

Router(config-if)#ip address 192.168.2.6 255.255.255.0

Router(config-if)#

Router(config-if)#exit

Router(config)#interface FastEthernet0/1

Router(config-if)#ip address 192.168.3.3 255.255.255.0

Router(config-if)#ip address 192.168.3.3 255.255.255.0

```
Router(config-if)#no shutdown
```

```
Router(config-if)#
```

```
%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up
```

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up
```

```
Router(config-if)#exit
```

```
Router(config)#interface FastEthernet0/0
```

```
Router(config-if)#no shutdown
```

```
Router(config-if)#
```

```
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
```

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
```

```
Router(config-if)#
```

```
Router(config-if)#exit
```

```
Router(config)#router rip
```

```
Router(config-router)#network 192.168.2.0
```

```
Router(config-router)#network 192.168.3.0
```

**Conclusion :**

Implementing the Routing Information Protocol (RIP) in Cisco Packet Tracer provides a hands-on experience of how a distance-vector routing protocol functions. Through this activity, key networking concepts like route advertisement, convergence, and autonomous systems are reinforced. Overall, the RIP implementation offers a valuable learning experience. It lays a solid foundation for understanding more advanced protocols and emphasizes the importance of selecting appropriate routing protocols based on network size and requirements.