

## PRACTICAL – 2

**Configure a router (Ethernet & Serial Interface) using router commands including access lists on any network simulator (eg. packet Tracer)**

### Step 1:

Take two routers.



### Step 2:

Connect both routers with serial DTE cable.



**Step 3:**

Configure both routers. Router 0 through direct config and Router 1 with CLI.

The screenshot shows the 'Router0' configuration window with the 'Config' tab selected. The left sidebar shows a tree view with 'INTERFACE' expanded, listing 'FastEthernet0/0', 'FastEthernet0/1', and 'Serial0/0/0'. The main area is titled 'Serial0/0/0' and contains the following settings:

- Port Status: ☒ On
- Clock Rate: 2000000
- Duplex: ☐ Full Duplex
- IP Address: 192.168.20.2
- Subnet Mask: 255.255.255.0
- Tx Ring Limit: 10

Below the settings, there is a section titled 'Equivalent IOS Commands' with a text area containing the following commands:

```

Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface Serial0/0/0
Router(config-if)#ip address 192.168.20.2 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#
  
```

The screenshot shows the 'Router1' configuration window with the 'CLI' tab selected. The main area is titled 'IOS Command Line Interface' and displays a text area with the following text:

```

Enter interface name used to connect to the
management network from the above interface summary: config
Invalid interface
Enter interface name used to connect to the
management network from the above interface summary: n
Invalid interface
Enter interface name used to connect to the
management network from the above interface summary: n
Invalid interface
Enter interface name used to connect to the
management network from the above interface summary:
Press RETURN to get started!

Router>enable
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface s0/0
%Invalid interface type and number
Router(config)#interface
% Incomplete command.
Router(config)#interface s0/0/0
Router(config-if)#ip address 192.168.2.0.256.256
^
% Invalid input detected at '^' marker.
Router(config-if)#ip address 192.168.0.4 255.255.255.0
Router(config-if)#no shutdown

%LINK-S-CHANGED: Interface Serial0/0/0, changed state to down
Router(config-if)#
  
```

At the bottom right of the text area, there are 'Copy' and 'Paste' buttons.

**Step 4:**

The router has been configured.

