I first set up the IP Address, Subnet Mask, and Default Gateway for six PC's in order to allow connection with the Switches and the router.

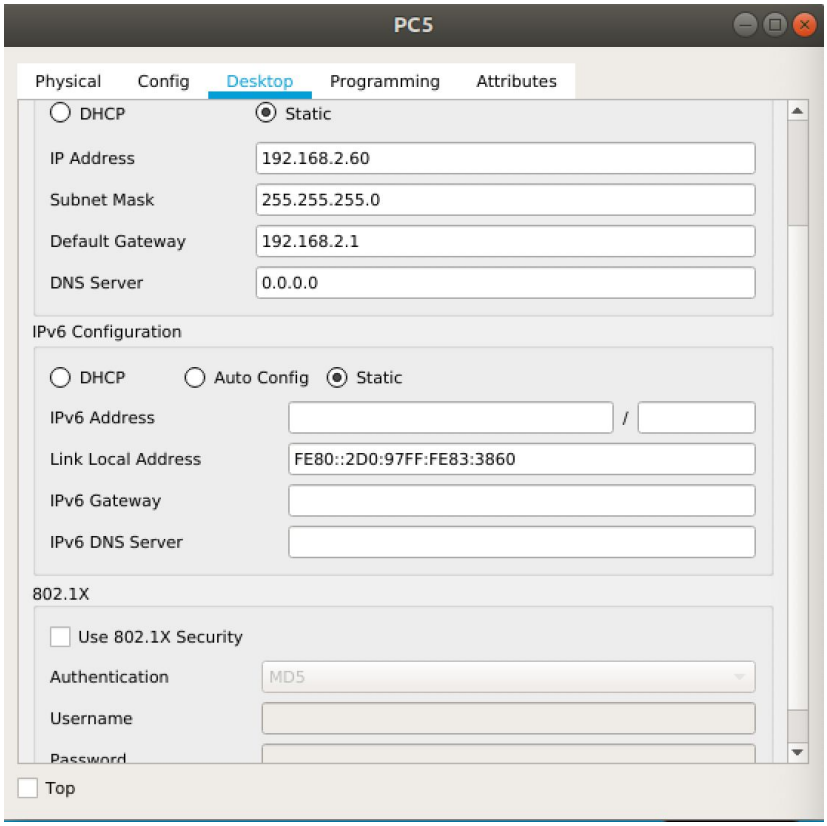

Figure 1. PC Configuration.

I then set up configurations with the switches to ensure configuration from console to console.

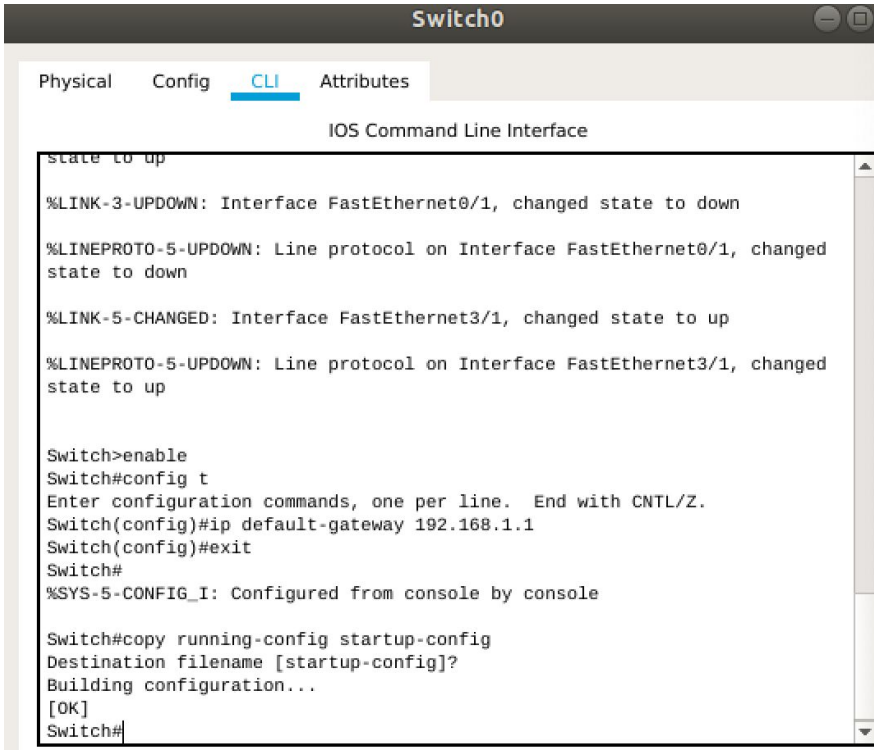

Figure 2. Switch Configuration.

The diagram below conveys that all the switches and PC's are properly connected.

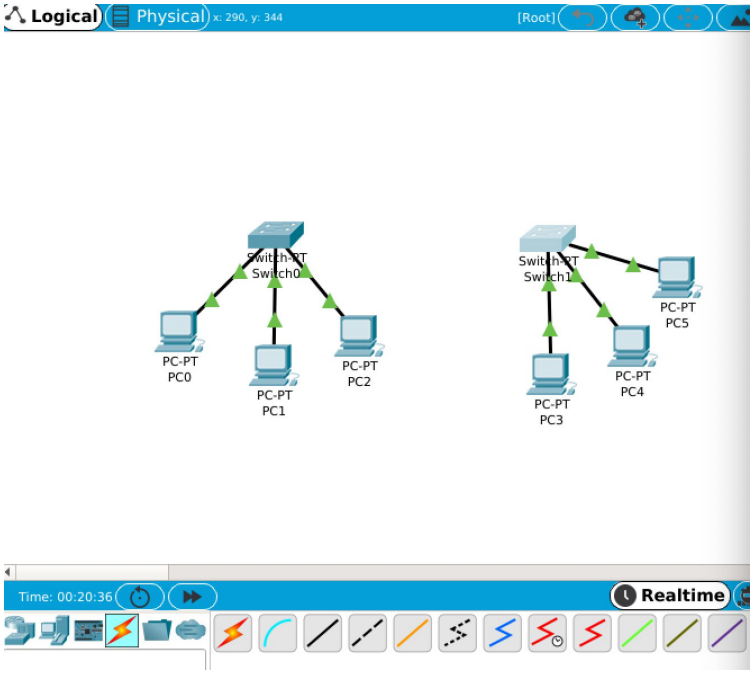

Figure 3. Connection between switches and PC's.

After that, I insert the router in the free space in order to connect multiple networks and forward packets. I configure the Router to change the interface state to up.

```
Router>enable
Router#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#hostname R1
R1(config)#interface FastEthernet0/0
R1(config-if)#ip address 192.168.1.1 255.255.255.0
R1(config-if)#no shut

R1(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

R1(config-if)#end
R1#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
```

Figure 4. Process to connect router to switches.

As a result, there is a successful connection between the router and the switch.

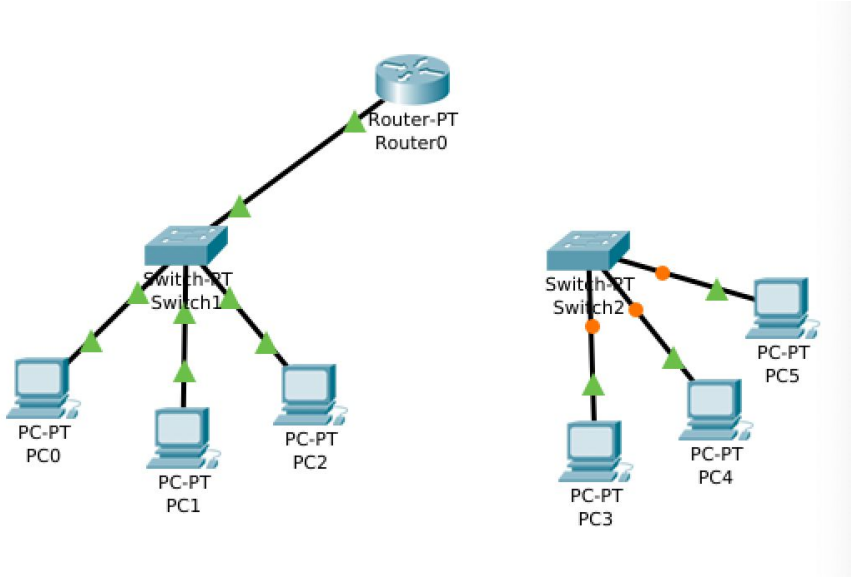

Figure 5. Connection of router, switches, and PC's.

I then perform the same process in order for the router to connect with switch 2. Finally, I test the network connectivity with a few combinations.

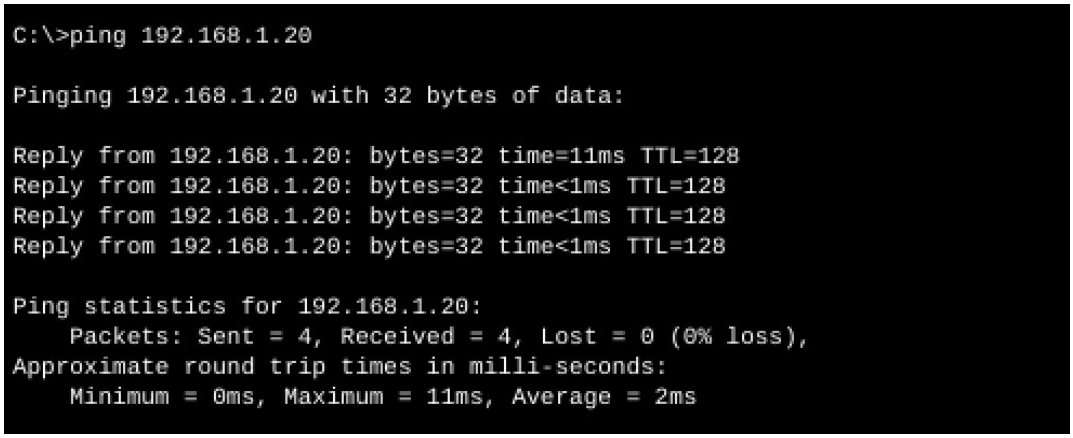

Figure 6. Testing Network Connectivity of PC 2 with PC 1.

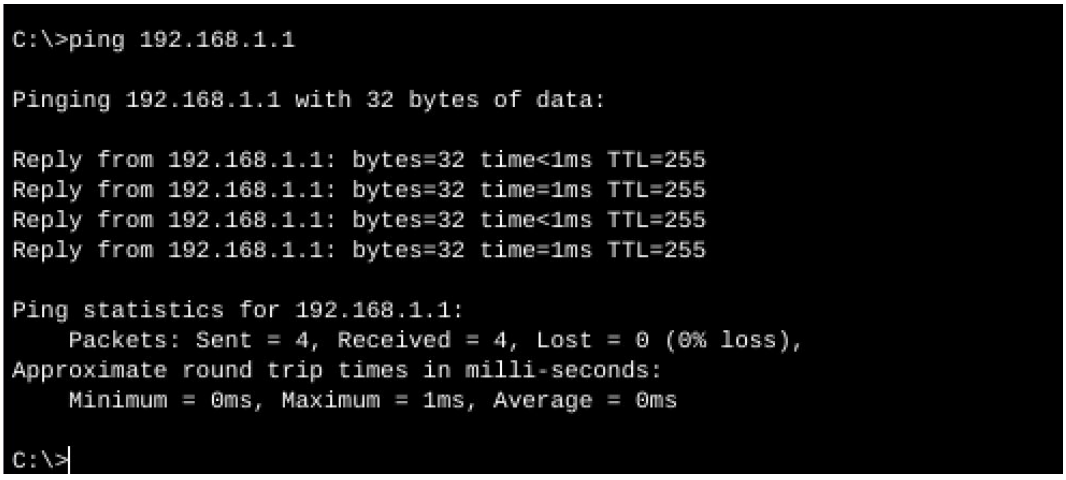

Figure 7. Testing Network Connectivity of R1 with PC 1.

Ultimately, this project provided me with an exposure to the further applications of the Cisco Packet Tracer, particularly with how a router connects with switches and PC's.