**PART-1  
*Step-1:***PC1 -> Command Prompt -> C:\>ipconfig /all  
PC3 -> Command Prompt -> C:\>ipconfig /all  
PC1 -> Command Prompt -> ping 10.10.1.18  
PC3 -> Command Prompt -> ping 10.10.1.98

***Step-2:***PC1 -> Command Prompt -> tracert 10.10.1.18  
PC3 -> Command Prompt -> tracert 10.10.1.98  
**Router 1**  
User Access Verification  
Password:cisco   
R1>en  
Password: class  
R1#show ip route  
**Router-3**User Access Verification  
Password:cisco   
R3>en  
Password: class  
R3#show ip route  
**Router-2**User Access Verification  
Password:cisco   
R2>en  
Password: class  
R2#show ip interface brief  
 ***Step-3: Updating IP Address of R2’s S0/0/0 Interface***R2#conf t  
R2 (configure)#interface s0/0/0   
R2 (configure-if)#ip address 10.10.1.5 255.255.255.252  
R2 (configure-if)#no shutdown

*Step-5:* ***Connectivity Tests from PC1 to PC3***PC1 -> Command Prompt -> ping 10.10.1.18  
PC3 -> Command Prompt -> ping 10.10.1.98

**PART-2  
*Step-1:***PC2 -> Command Prompt -> C:\>ipconfig /all  
PC4 -> Command Prompt -> C:\>ipconfig /all  
PC2 -> Command Prompt -> ping 2001:DB8:1:4::2  
PC4 -> Command Prompt -> ping 2001:DB8:1:1::2

***Step-2:***PC2 -> Command Prompt -> tracert 2001:DB8:1:4::2  
PC4 -> Command Prompt -> tracert 2001:DB8:1:1::2  
**Router-3**User Access Verification  
Password:cisco   
R3>en  
Password: class  
R3#show ipv6 interface brief

***Step-3: Updating IP Address of PC4’s Default Gateway***Done through the IP Configuration mode of the PC4.

***Step-5:******Connectivity Tests from PC1 to PC3***PC2 -> Command Prompt -> ping 2001:DB8:1:4::2  
PC4 -> Command Prompt -> ping 2001:DB8:1:1::2