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| A picture containing drawing, stop, room  Description automatically generated | Morden Networking  Practical # 1 | | |
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| **Subject/Course:** | Morden Networking | **Class** | M.Sc. IT – Sem II |
| **Topic** | Using the AS\_PATH attribute of BGP | **Batch** | 1 |
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| **Topic: Using the AS\_PATH attribute (Autonomous System path attribute) of BGP(Border Gateway Protocol)** | | | |
| 1. Open GNS3 and create a new project. 2. Drag and drop 3 routers as R1, R2, R3 3. Right click on router -> configure -> select router name -> slots -> Select slot 1 as NM-4T 3 4. Connect routers: R1 and R2 ==> s1/0 || R1 and R3 ==> s1/1 5. Label topology with given labels below and click on run 5 | | | |
| **CONSOLE (On Router console type following commands one by one.)** | | | |
| **R1 console**  R1#conf t  R1(config)#int s1/0  R1(config-if)#ip add 192.168.1.1 255.255.255.0  R1(config-if)#no sh  R1(config-if)#int s1/1  R1(config-if)#ip add 172.24.1.1 255.255.255.0  R1(config-if)#no sh  8 | | | |
| R2 console  R2#conf t  R2(config)#int s1/0  R2(config-if)#ip add 192.168.1.2 255.255.255.0  R2(config-if)#no sh  7 | | | |
| R3 CONSOLE  R3#conf t  R3(config)#int s1/1  R3(config-if)#ip add 172.24.1.3 255.255.255.0  R3(config-if)#no sh  9 | | | |
| **loopback address** | | | |
| R1 CONSOLE  int lo0  ip add 10.1.1.1 255.255.255.0  11 | | | |
| R2 CONSOLE  int lo0  ip add 10.2.2.2 255.255.255.0  12 | | | |
| R3 CONSOLE  int lo0  ip add 10.3.3.3 255.255.255.0  10 | | | |
| **bgp protocol** | | | |
| R1 CONSOLE  router bgp 100  neighbor 192.168.1.2 remote-as 200  neighbor 172.24.1.3 remote-as 300  network 10.1.1.0 mask 255.255.255.0  14 | | | |
| R2 CONSOLE  router bgp 200  neighbor 192.168.1.1 remote-as 100  network 10.2.2.0 mask 255.255.255.0  13 | | | |
| R3 CONSOLE  router bgp 300  neighbor 172.24.1.1 remote-as 100  network 10.3.3.0 mask 255.255.255.0  15 | | | |
| **do sh ip route** | | | |
| 1718  16 | | | |
| **OUTPUT** | | | |
| **From R2(COMPANY) to R3(CUSTOMER)**  do ping 10.3.3.3 source lo0  19 | | | |
| **From R3(CUSTOMER) to R2(COMPANY)**  do ping 10.2.2.2 source lo0  20 | | | |