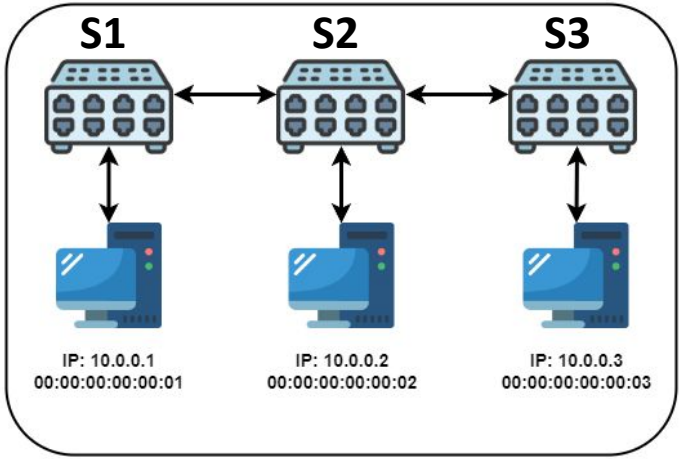
CN Lab Part-III

Assignment 6

- You are given the following network topology created in Mininet. The switch is configured without a controller, and you are required to manually add OpenFlow rules using **ovs-ofctl** commands on the switch (s1, s2, and s3). The objective is to set up traffic rules based on the following requirements:

- ✔ **Objective a: H1** should be allowed to send TCP traffic to **H2** and **H3**.
- ✔ **Objective b: H2** is blocked from sending TCP traffic to **H3**.



Adding Manual OpenFlow Rules on Switches

Task 9. VLAN Tagging and Modification

- Tag Incoming Traffic with VLAN ID 100:

sudo ovs-ofctl add-flow s1 in_port=1,actions=mod_vlan_vid:100,output:2

Task 10. Strip VLAN Tag and Forward:

sudo ovs-ofctl add-flow s1 dl_vlan=100,actions=strip_vlan,output:3

Assignment 7

- You are given the following network topology created in Mininet. The switch is configured without a controller, and you are required to manually add OpenFlow rules using **ovs-ofctl** commands on the switch (s1, s2, and s3). The objective is to set up traffic rules based on the following requirements:

- ✔ **Objective a:** Assign traffic originating from H1 as vlan10, H2 traffic as vlan 20, and H3 traffic as vlan 30 using mod_vlan_vid.

- ✔ **Objective b:** Allow traffic from each source to destination host using strip_vlan action (i.e all host should be able to communicate despite their different vlan id.)

- ✔ Also, show the traffic on the wireshark.