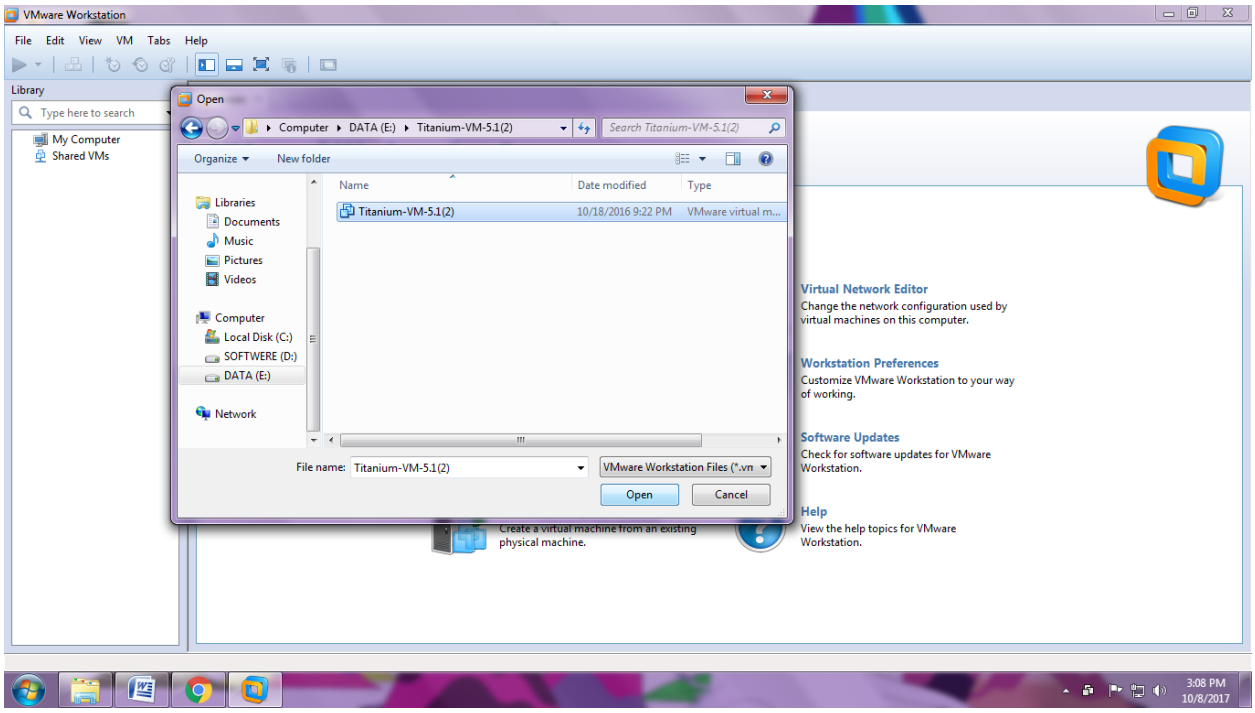
Practical No.7

Aim: Implement vlan concept with L2/L3 switches/nexus virtual switching (Titanium VM).

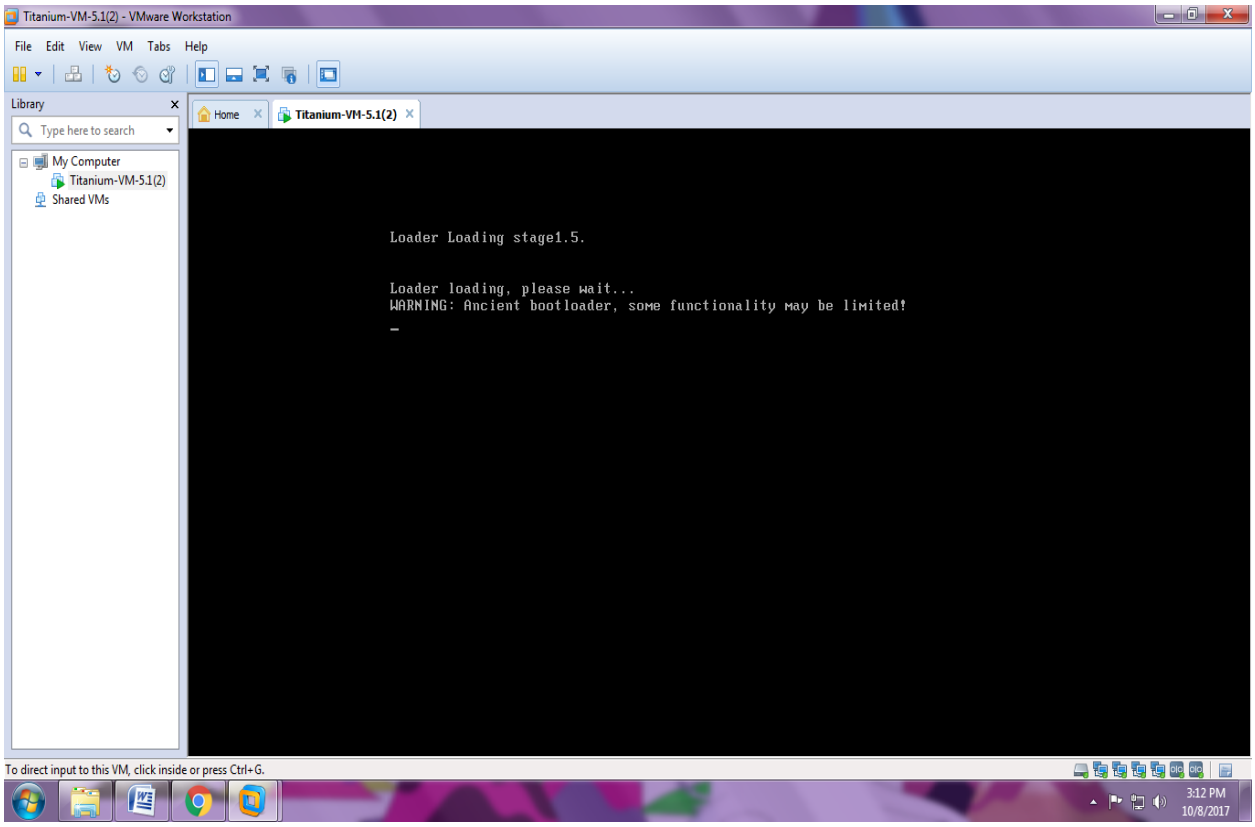
Steps:

Load the .vmx file of titanium vm and power on the virtual machine

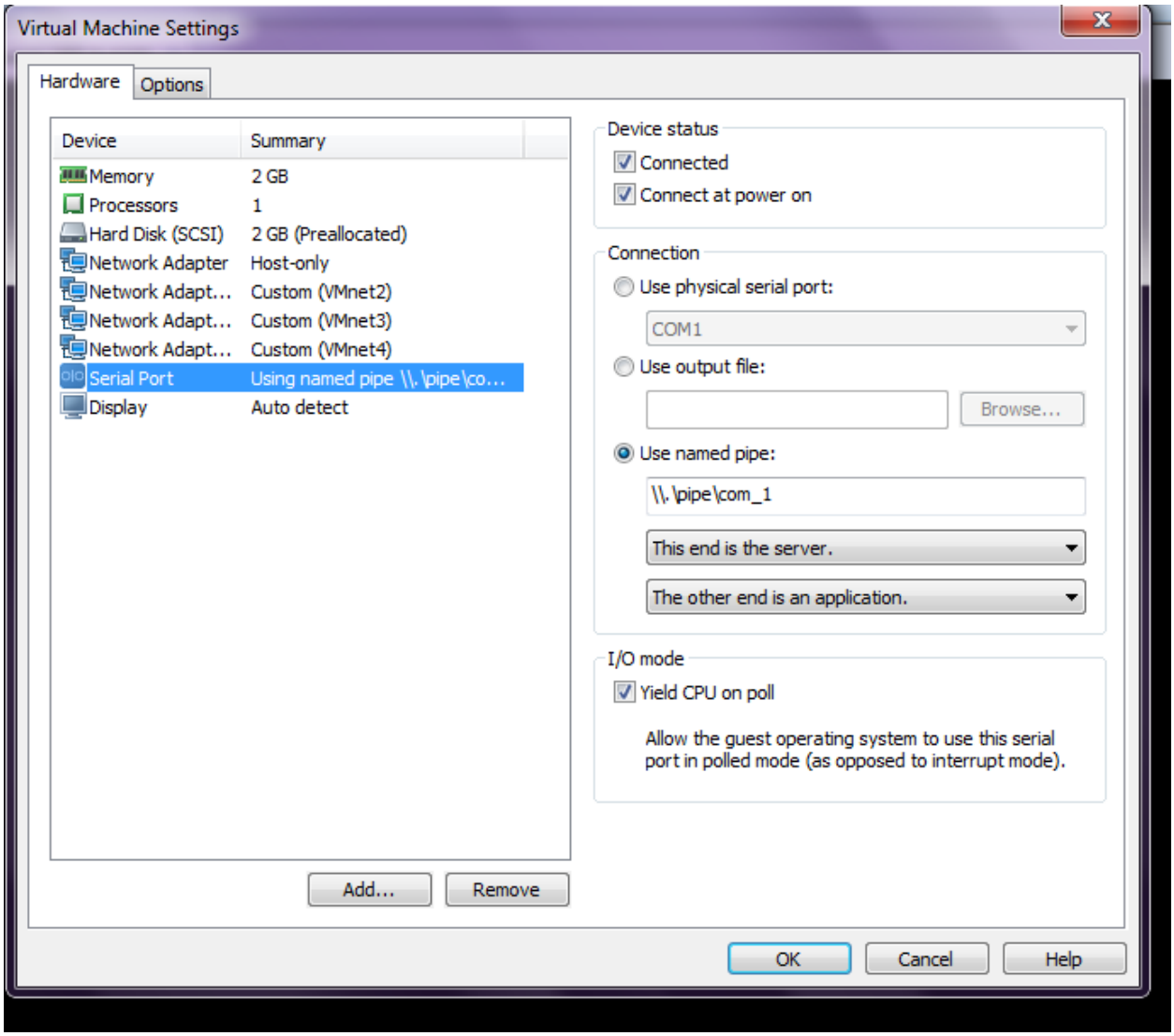


Step1:

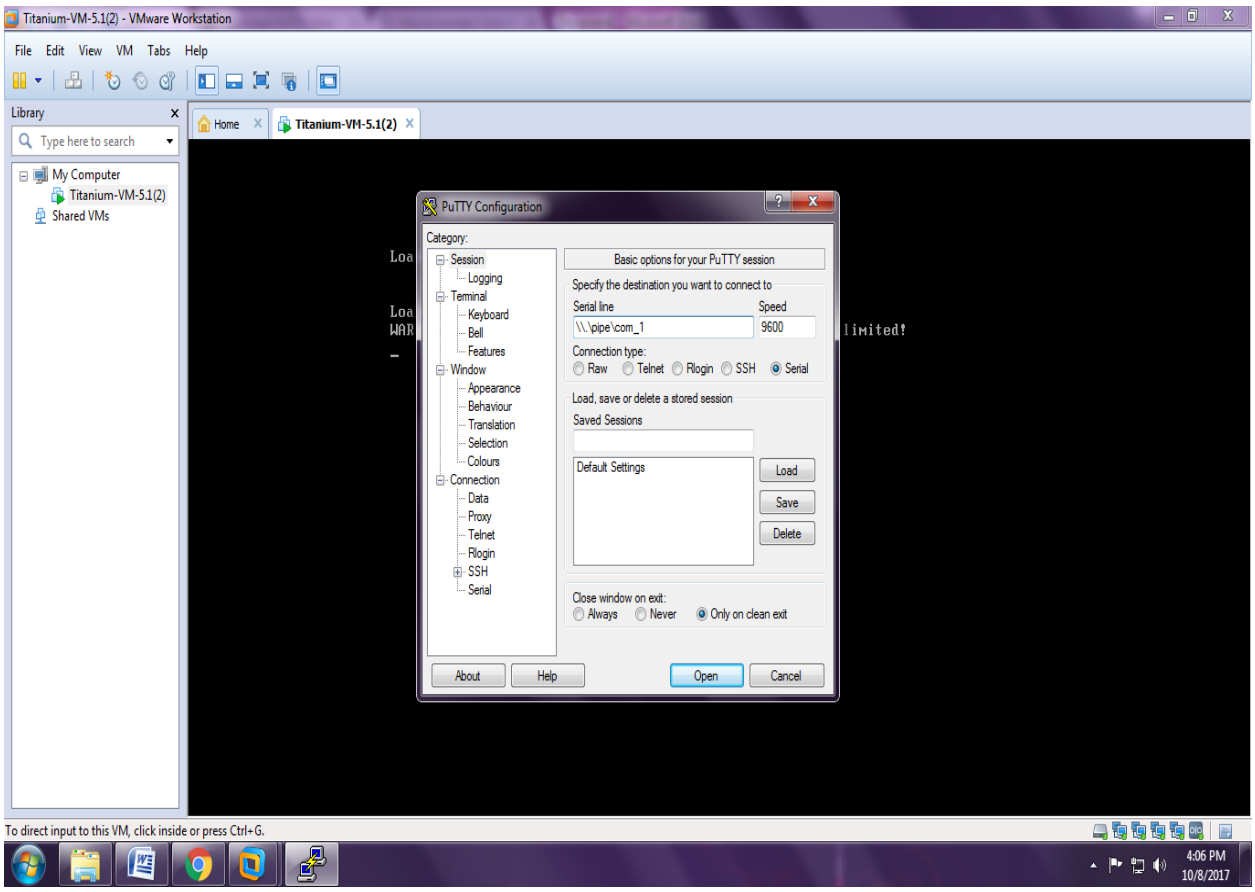
When you Open Titanium in VMware, the ancient boot loader problem occurs



Step 2: To solve this problem, Click on Edit virtual machine settings. : select Serial port (named pipe). Remove the serial port 2 and use only serial port .Select one end as a server and other end as a application Copy paste the name in text file for later use \\.\pipe\com_1

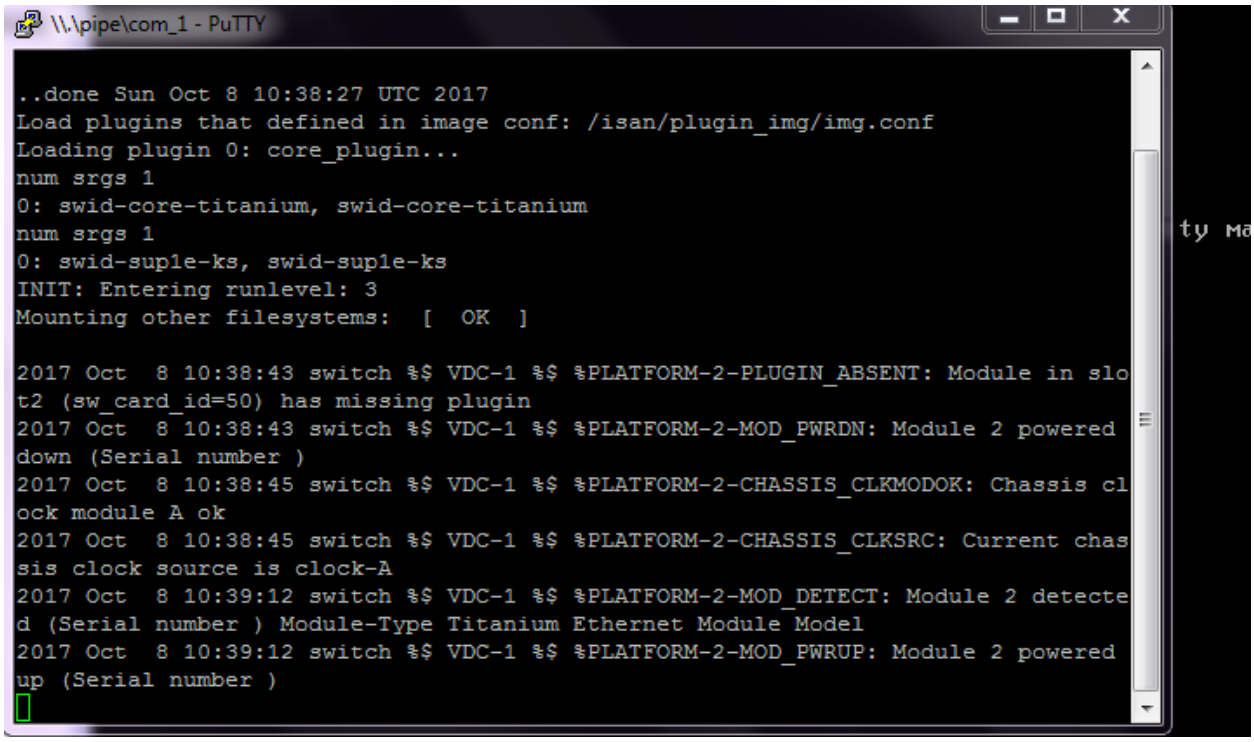


Step 3: Now install the putty and open it with run as Administrator. Then select the serial and paste the output file name in serial line-\\.\pipe\com_1

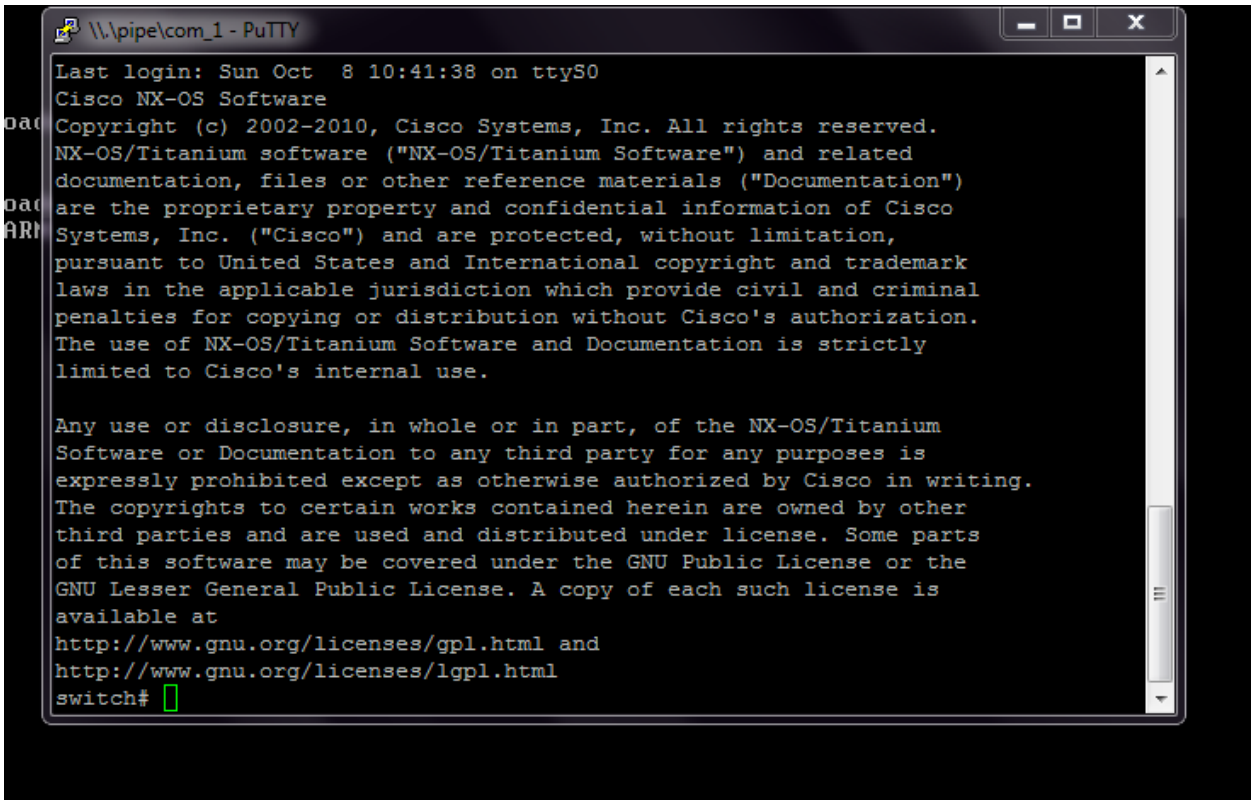


Step 4:

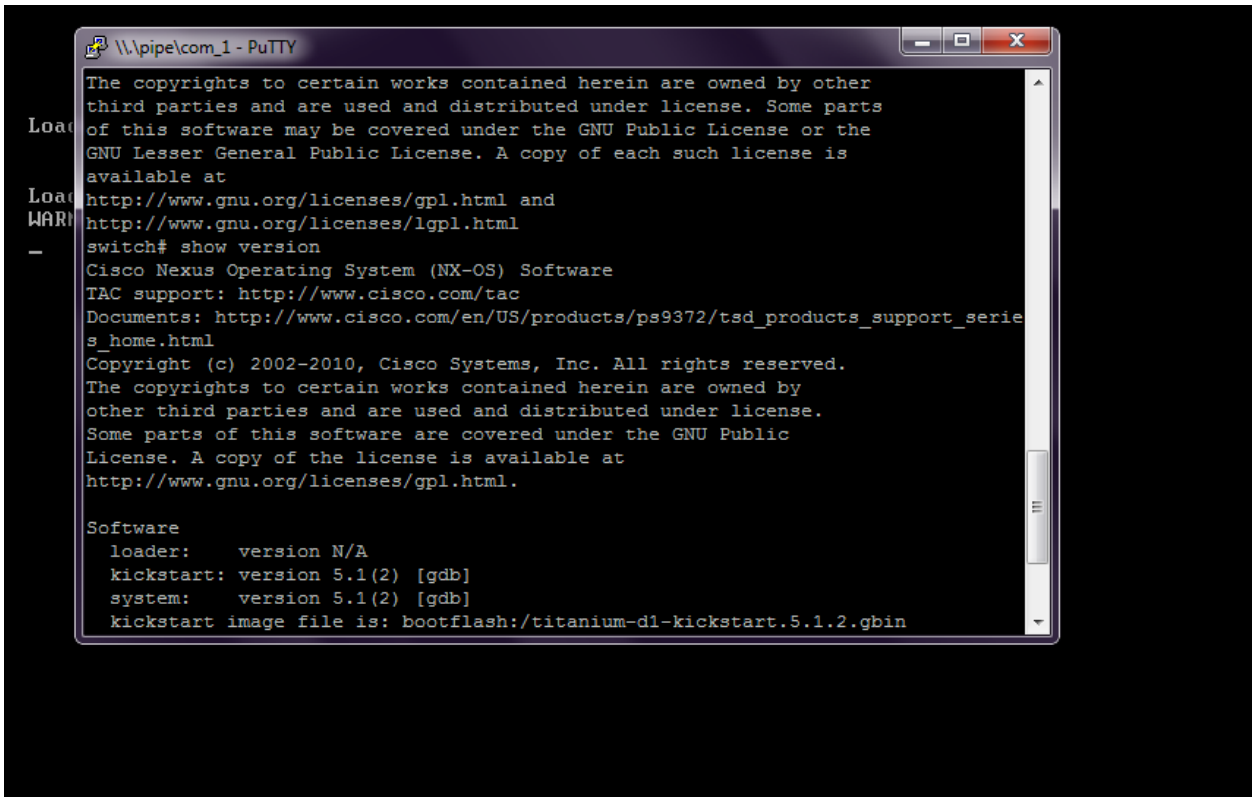
The terminal opens



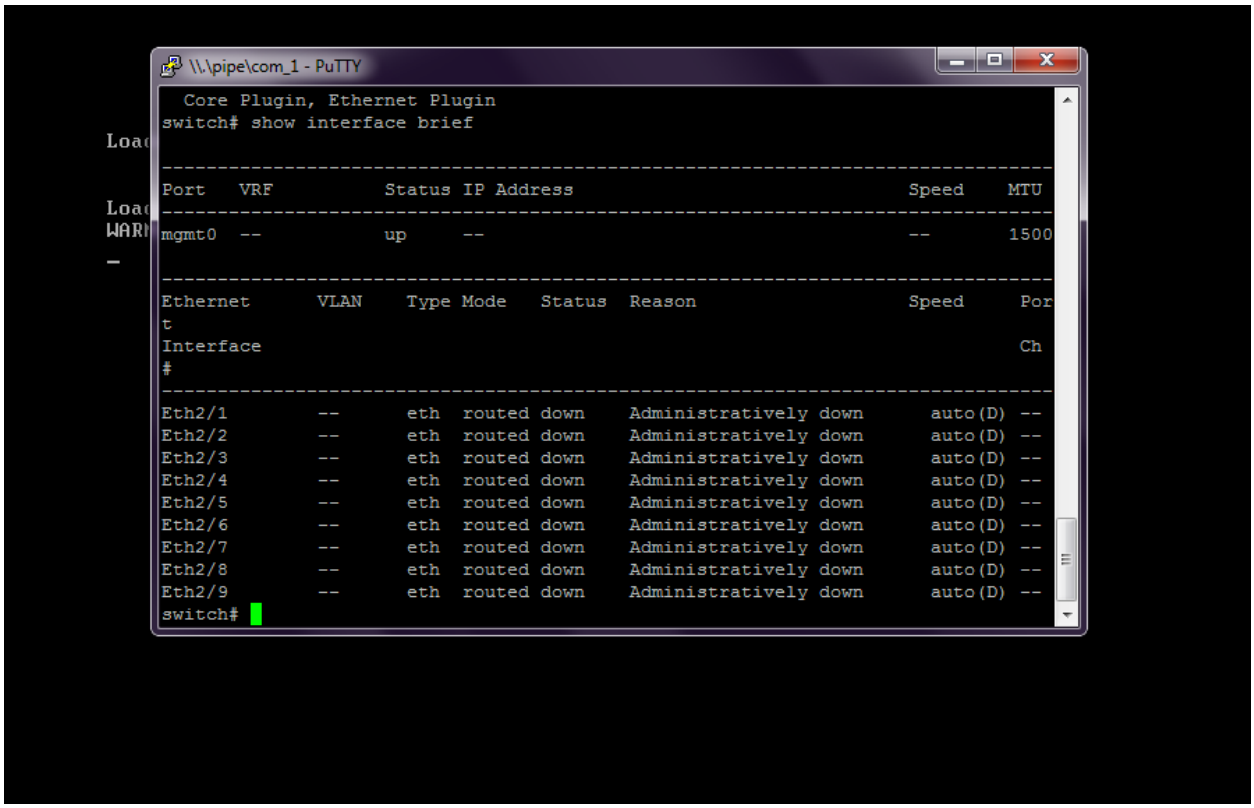
Step 5 : Enter the username as admin and password as cisco. Then switch# appears indicating that command can be entered.



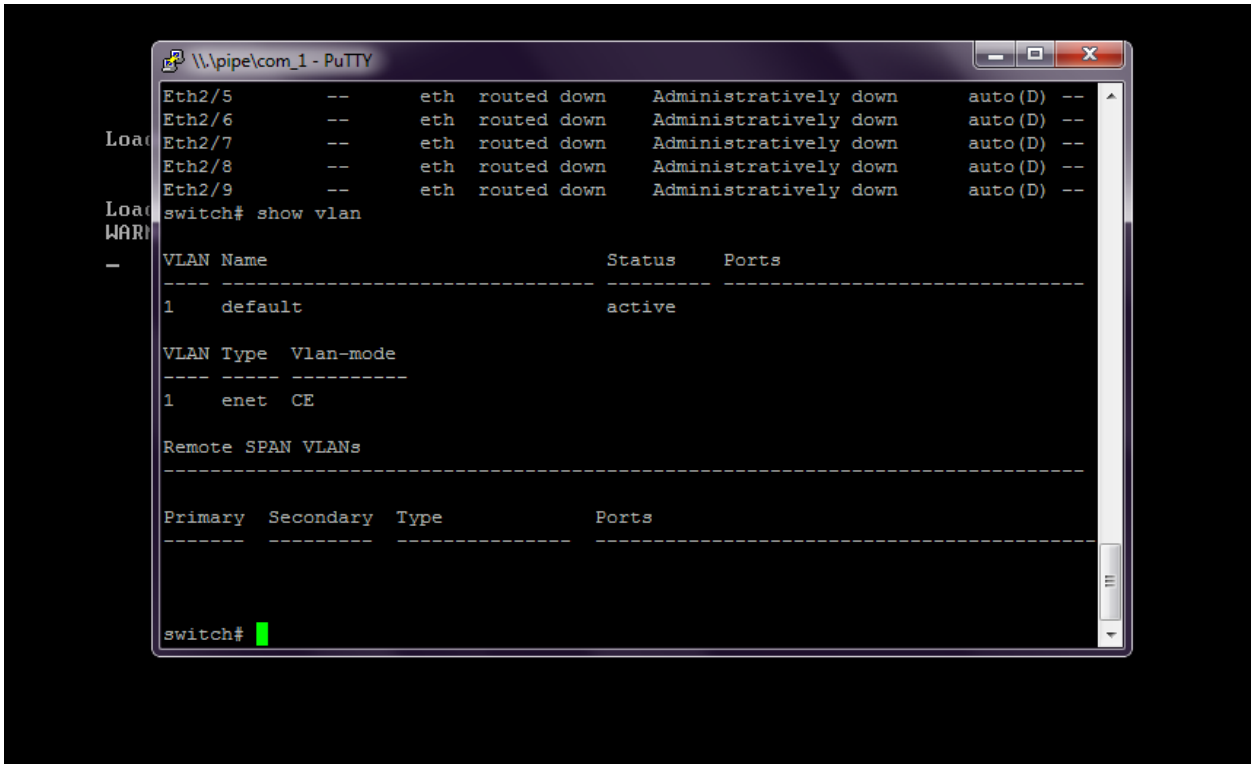
Step 6: Enter the command ‘show version’ to view the version of the nexus software.



Step 7: Enter the command ‘show interface brief ’ to view the details of interfaces.



Step 8: Enter the command ‘sh vlan’ to check the status of the vlans created.



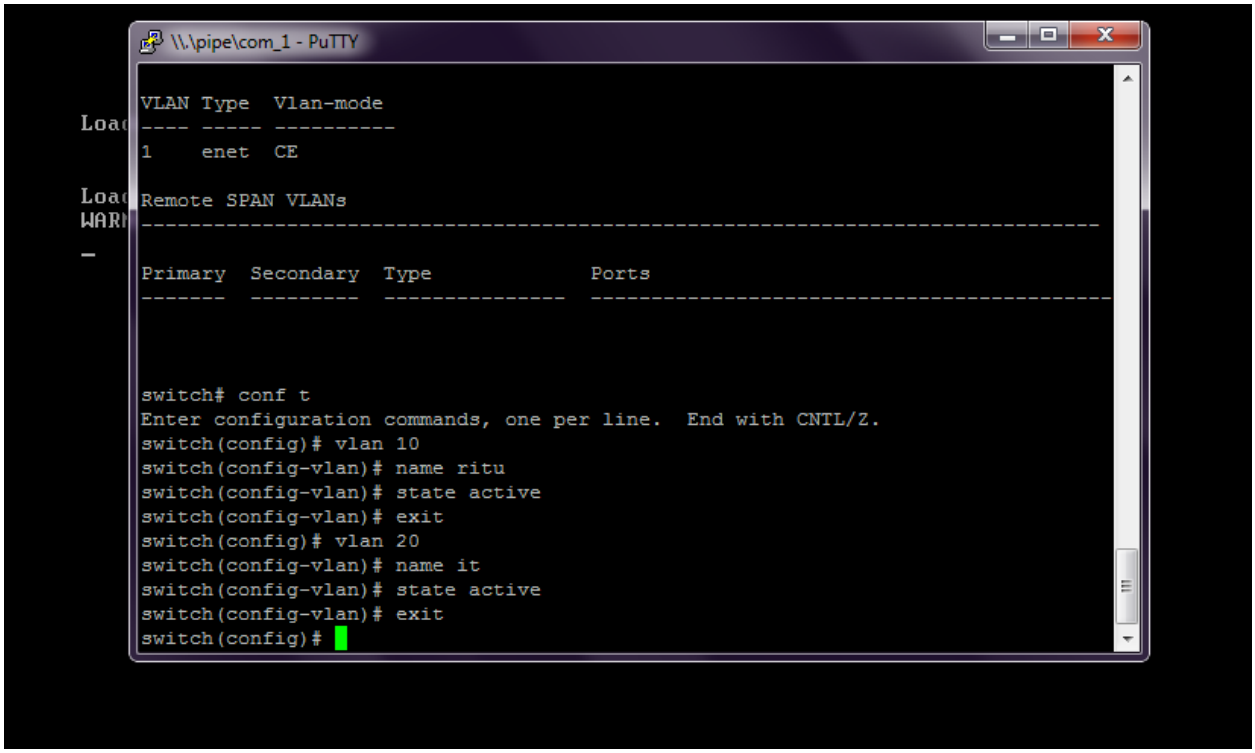
Step 9: Configure the terminal and enter the command to create vlan with id ‘10’ and name ‘ritu’. By default the status of vlan is active.

TO CREATE VLAN 10 WITH NAME RITU

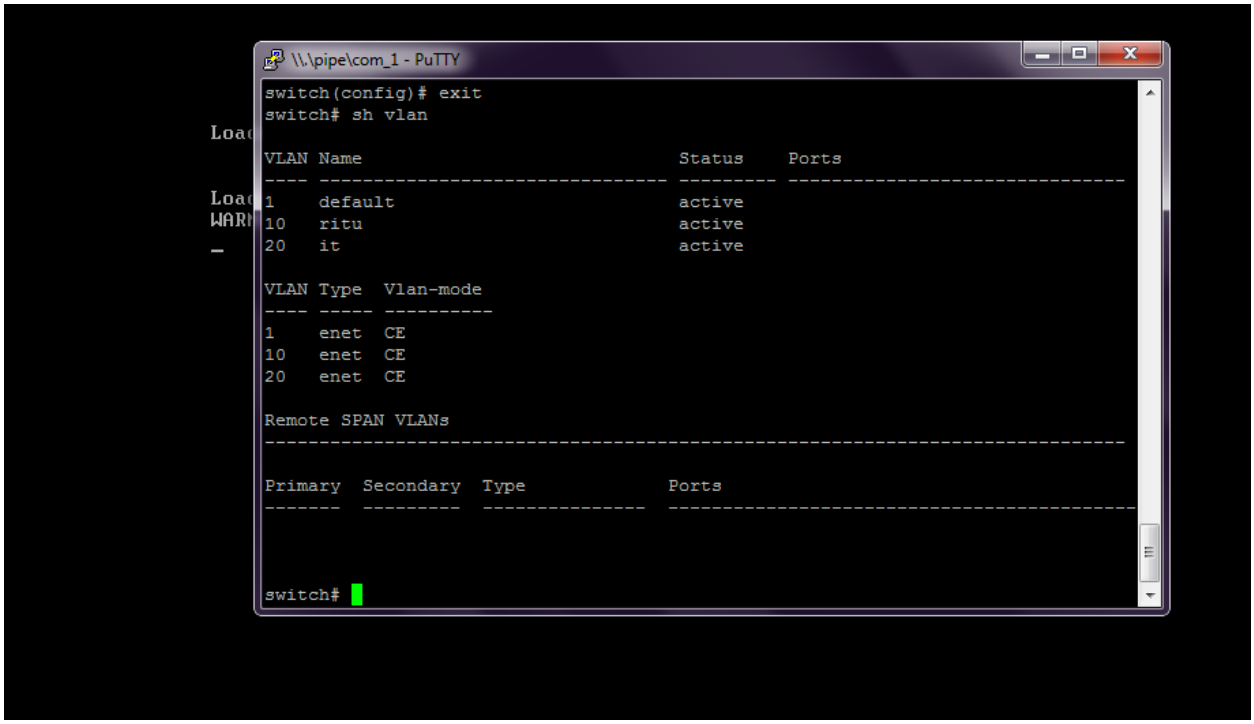
switch# conf t
switch(config)# vlan 10
switch(config-vlan)# name ritu
switch(config-vlan)# state active
switch(config-vlan)# exit

TO CREATE VLAN 20 WITH NAME IT

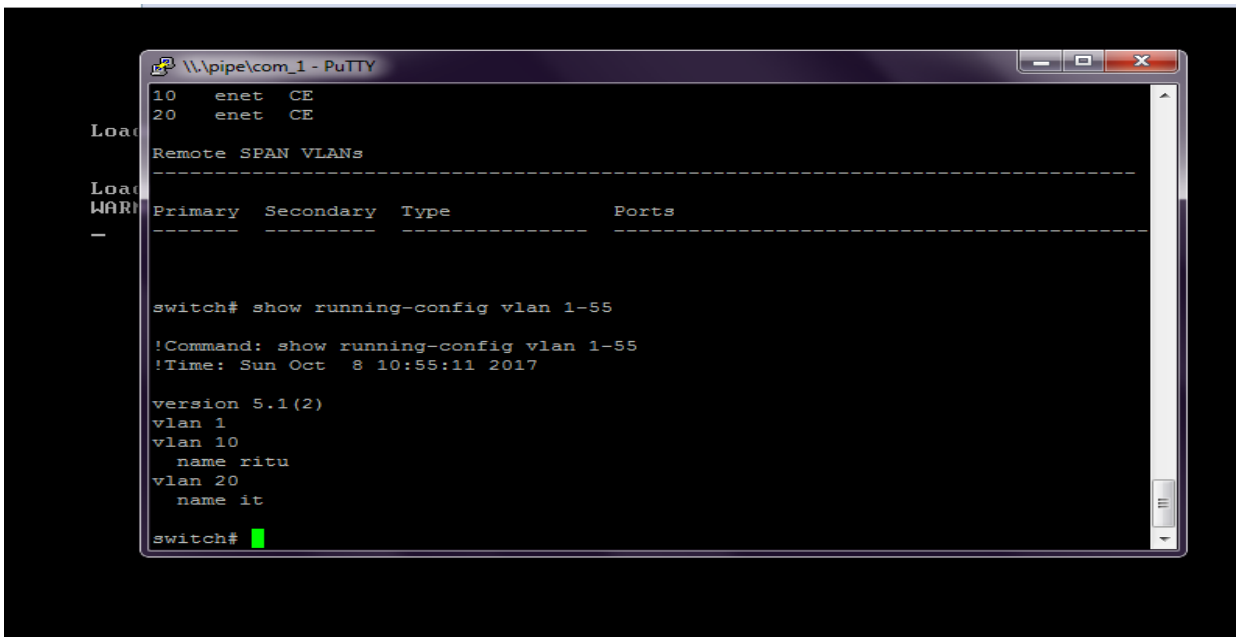
switch(config)# vlan 20
switch(config-vlan)# name it
switch(config-vlan)# state active
switch(config-vlan)# exit
switch(config)# exit



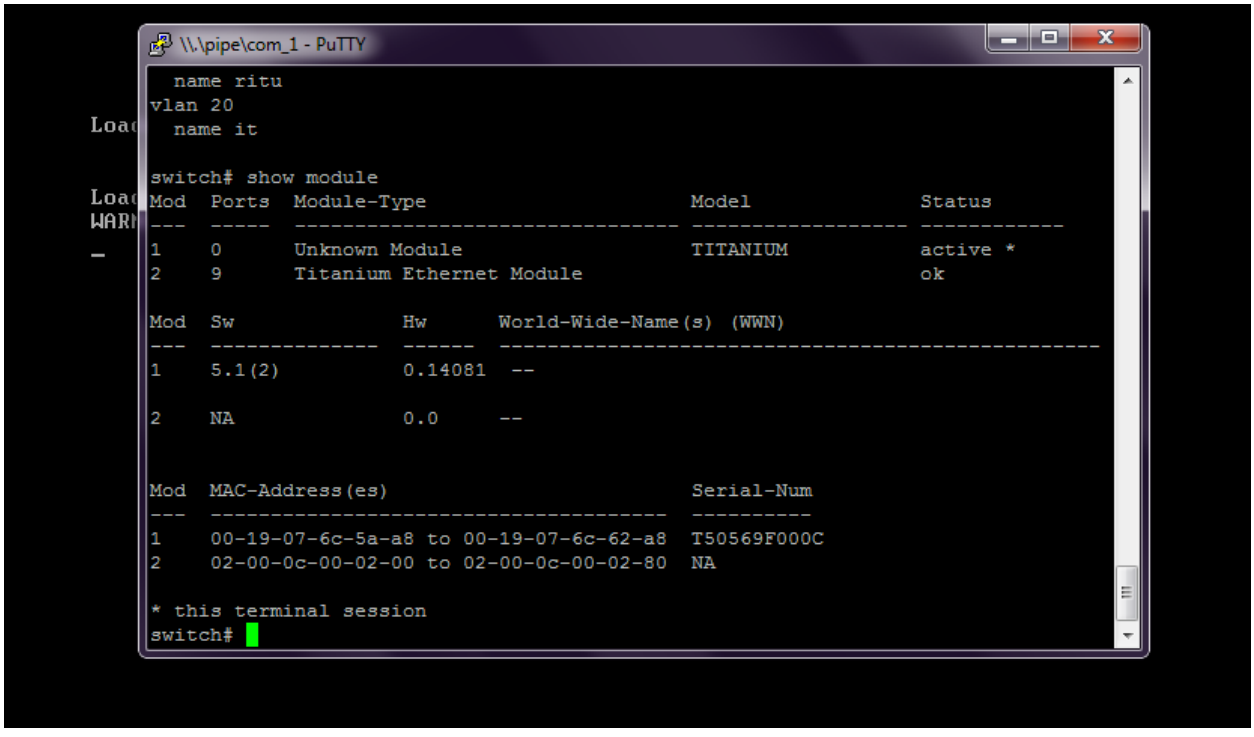
Step 11: Enter the command ‘sh vlan’ to check the status of the vlans created.



Step 12: Enter the following command to check the vlan’s created in the id range ‘1-55’.
switch# show running-config vlan 1-55

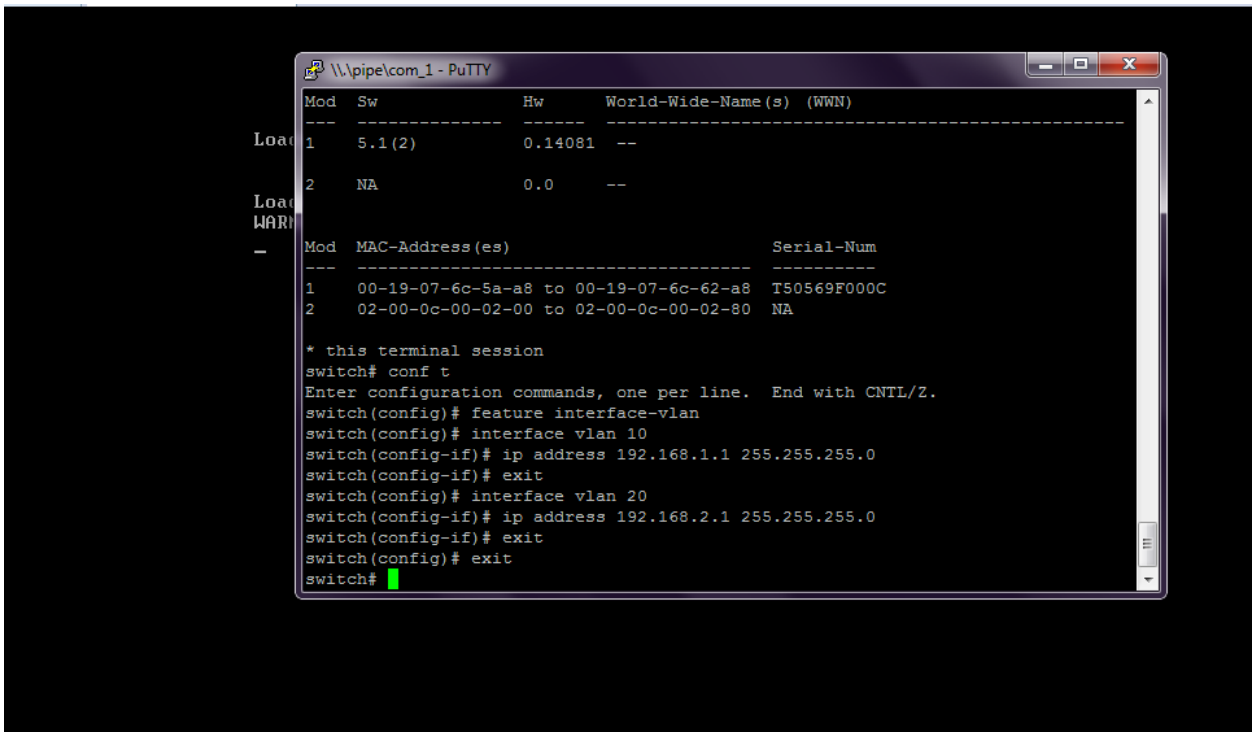


Step 13: Enter the command ‘show module’ to verify the status(presence) of a module at any time.



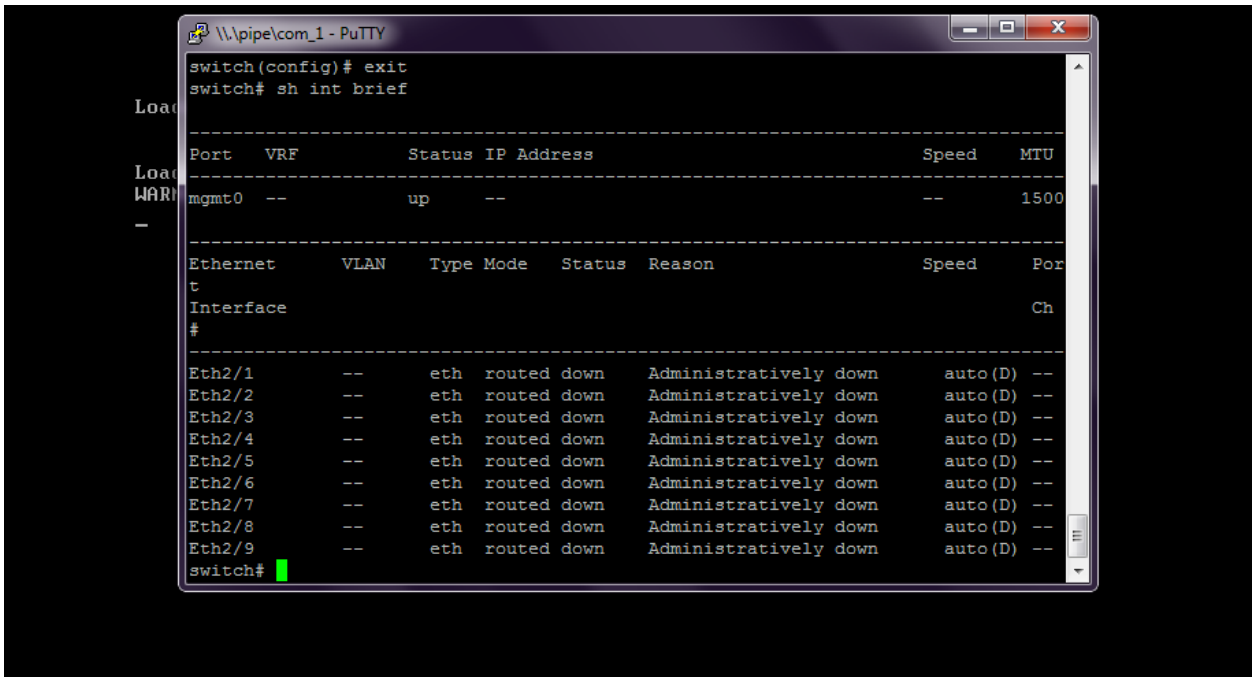
Step 14: Enter the command ‘feature interface-vlan’ to enable the VLAN interface mode and configure the ip address.

```
switch# conf t
switch(config)# feature interface-vlan
switch(config)# interface vlan 10
switch(config-if)# ip address 192.168.1.1 255.255.255.0
switch(config-if)# exit
switch(config)# interface vlan 20
switch(config-if)# ip address 192.168.2.1 255.255.255.0
switch(config-if)# exit
switch(config)# exit
```



Step 15: Enter the command ‘show interface brief ’ to view

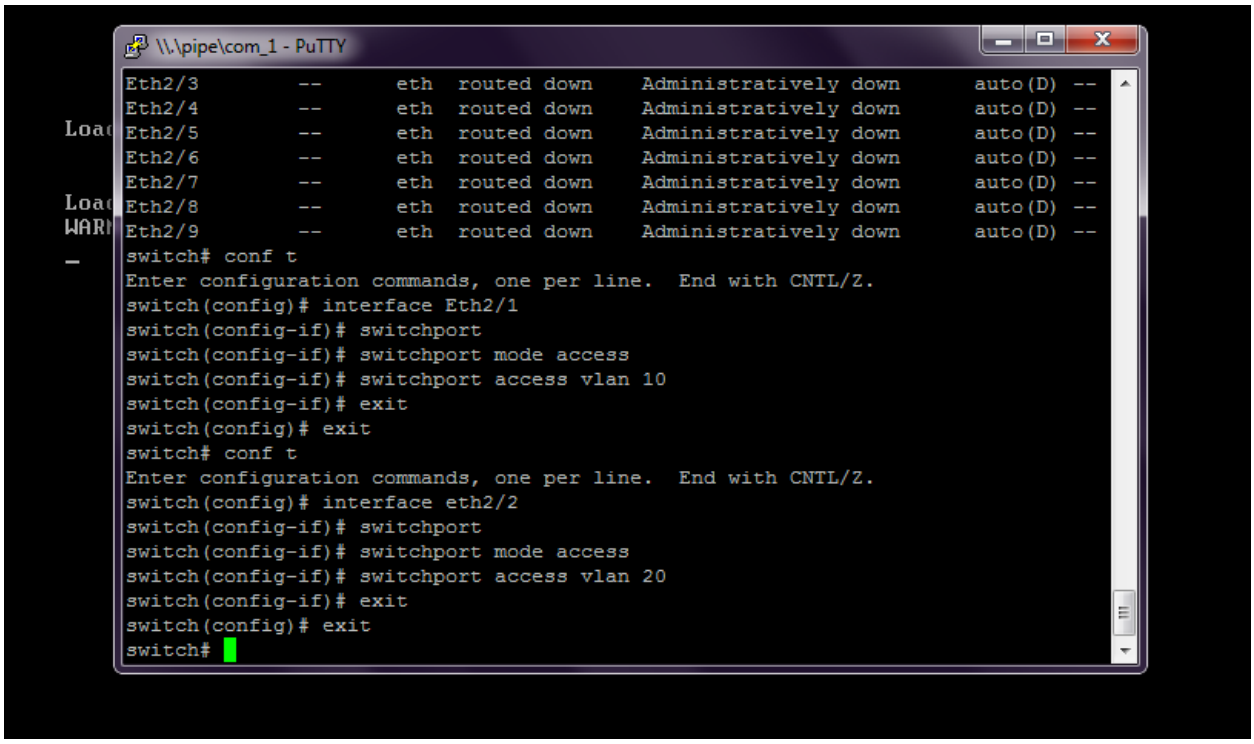
the details of interfaces.



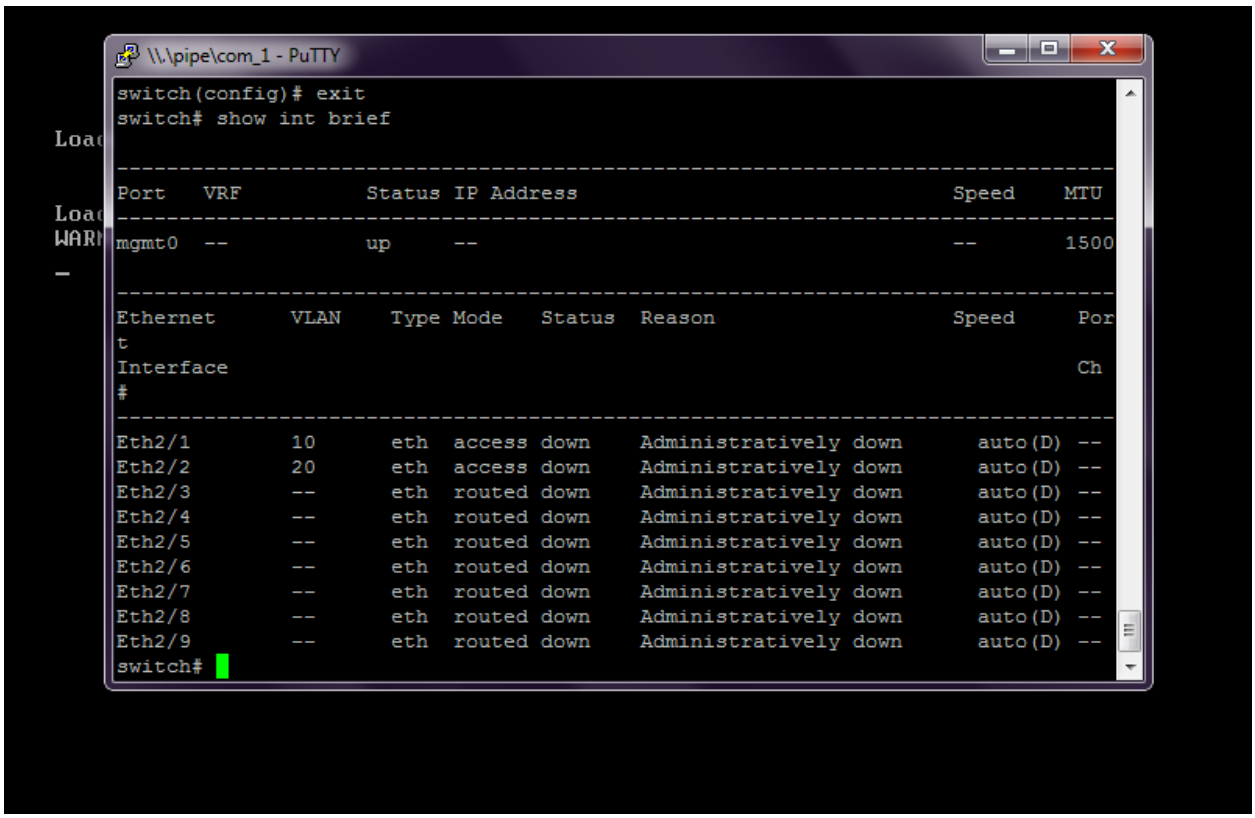
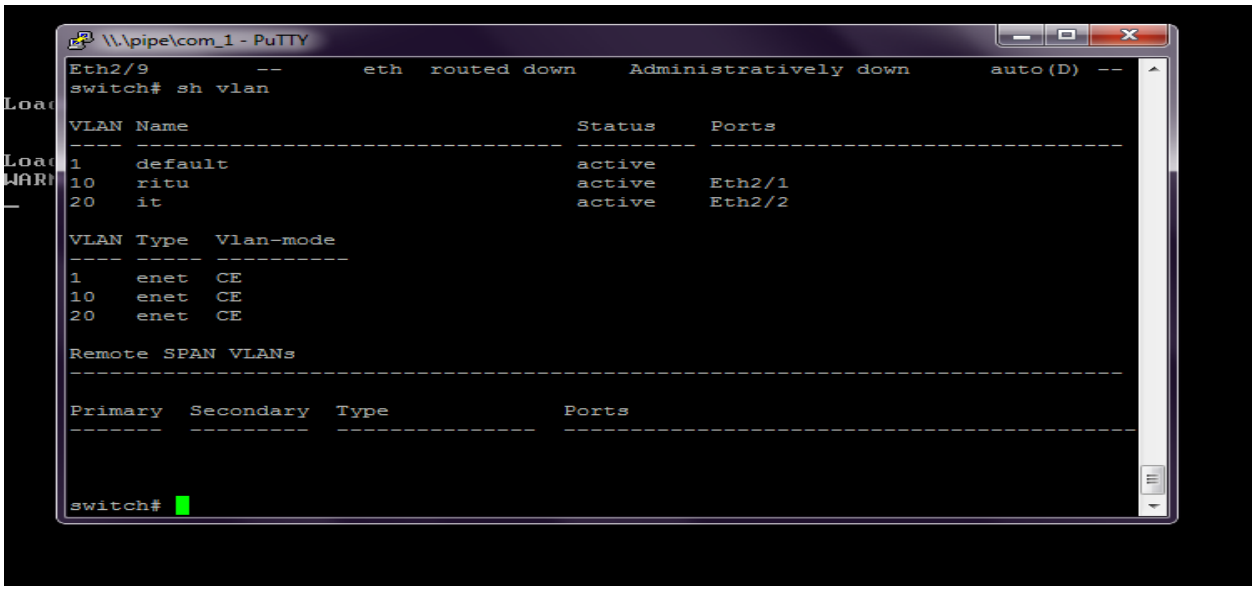
Step 16: Enter the command ‘switchport mode access’ to set the access port to carry traffic for a different vlan.

switch# conf t
switch(config)# interface Eth2/1
switch(config-if)# switchport
switch(config-if)# switchport mode access
switch(config-if)# switchport access vlan 10
switch(config-if)# exit
switch(config)# exit
switch# conf t
switch(config)# interface eth2/2
switch(config-if)# switchport
switch(config-if)# switchport mode access

switch(config-if)# switchport access vlan 20
switch(config-if)# exit
switch(config)# exit



Step 17: Enter the command ‘show interface brief ’ to view the details of interfaces.



Step 18: Enter the command ‘sh vlan’ to check the status of the vlans created.