-We know that the default IP address of the VM is 192.168.56.101.

-Using nmap –A 192.168.56.101 shows that the 2 open ports are 21 and 22.

-The VM uses vsftpd of version 2.0.8 or later.

- Therefore, it is exposed to the backdoor vulnerability for vsftpd 2.3.4, which we can exploit.

-Knowing that, we initialized a connection with the server through ftp (port 21) and passed in “Socks:)” as the user and “Stripes” as the password.

-This will open a backdoor on port 6200, which we can gain access to.

-First, we echo the inputs for username and password, “Socks:)” and “Stripes”, respectively and piped them into the ftp connection of the server

-Next, we used nc –i 1 –w 5 $1 21 –v to start a ftp connection with the server.

- The flag –i 1 is used such that the arguments we passed in will be used as inputs with an interval of 1 second, such that we can enter the username and password separately.

-The flag –w 5 is used so that the connection will be closed if it is inactive for 5 seconds

-After 5 seconds, the respective username and password will be entered into the server and the ftp connection will be closed.

-At this point of time, the backdoor is opened through port 6200

-Thus, we used nc $1 6200 –v to access the server through the backdoor at port 6200, where $1 is the IP address of the host that we are trying to hack into.