

Task 7: Port Scanner Script

1. Create the script:

```
#!/bin/bash
```

```
read -p "Enter the IP address to scan: " TARGET_IP
```

```
echo "Scanning ports 20 to 25 on $TARGET_IP..."
```

```
for PORT in {20..25}; do
```

```
timeout 1 bash -c "echo > /dev/tcp/$TARGET_IP/$PORT" 2>/dev/null \
```

```
&& echo "Port $PORT is OPEN" \
```

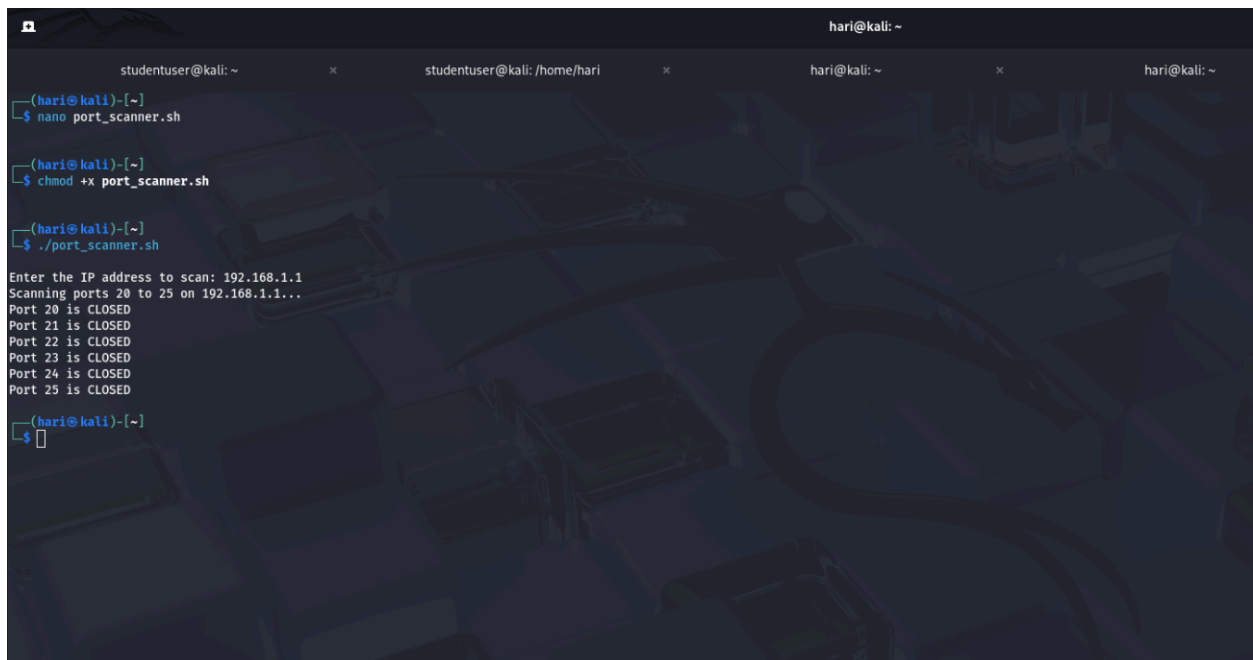
```
|| echo "Port $PORT is CLOSED"
```

```
done
```

2. Run the script:

```
chmod +x port_scanner.sh
```

```
./port_scanner.sh
```



```
hari@kali: ~  
studentuser@kali: ~ x studentuser@kali: /home/hari x hari@kali: ~ x hari@kali: ~  
(hari@kali)-[~]  
$ nano port_scanner.sh  
(hari@kali)-[~]  
$ chmod +x port_scanner.sh  
(hari@kali)-[~]  
$ ./port_scanner.sh  
Enter the IP address to scan: 192.168.1.1  
Scanning ports 20 to 25 on 192.168.1.1...  
Port 20 is CLOSED  
Port 21 is CLOSED  
Port 22 is CLOSED  
Port 23 is CLOSED  
Port 24 is CLOSED  
Port 25 is CLOSED  
(hari@kali)-[~]  
$
```

Conclusion: Task 7 involved writing a port scanner script to check ports 20–25 on a user-supplied IP using `nc` or `timeout`. It helped practice basic network scanning and demonstrated how to identify open or closed ports through scripting.