Name: Md. Shakil Hossain
ID: 2111258

Case-01

```
┌──(root㉿kali)-[/home/kali]
└─# echo "aHR0cHM6Ly9kcml2ZS5nb29nbGUuY29tL2RyaXZlL2ZvbGRlcnMvMUJfODJraGkwckh
Ja2Nla0V4Z
kZraWE5aDVPclBFTFlWP3VzcD1zaGFyaW5n" | base64 --decode
https://drive.google.com/drive/folders/1B_82khi0rHIkcekExfFkia9h5OrPELYV?usp=
sharing


┌──(root㉿kali)-[/home/kali]
└─#
```

Answer to the question no - 01

For image: IMG20240925211600.jpg

```
Aperture                       : 1.7
Image Size                     : 3000×4000
Megapixels                     : 12.0
Scale Factor To 35 mm Equivalent: 0.8
Shutter Speed                  : 1/50
Create Date                    : 2024:09:25 21:16:00.871
Date/Time Original             : 2024:09:25 21:16:00.871+06:00
Modify Date                    : 2024:09:25 21:16:00.871
Circle Of Confusion            : 0.035 mm
Field Of View                  : 154.9 deg
Focal Length                   : 4.7 mm (35 mm equivalent: 4.0 mm)
Hyperfocal Distance            : 0.37 m
Light Value                    : 6.9
```

For image: IMG20240925221834.jpg

```
ract)
Image Width                    : 3000
Image Height                   : 4000
Encoding Process               : Baseline DCT, Huffman coding
Bits Per Sample                : 8
Color Components               : 3
Y Cb Cr Sub Sampling           : YCbCr4:2:0 (2 2)
Aperture                       : 1.7
Image Size                     : 3000×4000
Megapixels                     : 12.0
Scale Factor To 35 mm Equivalent: 0.8
Shutter Speed                  : 1/17
Create Date                    : 2024:09:25 22:18:34.529
Date/Time Original             : 2024:09:25 22:18:34.529+06:00
Modify Date                    : 2024:09:25 22:18:34.529
Circle Of Confusion            : 0.035 mm
Field Of View                  : 154.9 deg
Focal Length                   : 4.7 mm (35 mm equivalent: 4.0 mm)
Hyperfocal Distance            : 0.37 m
Light Value                    : 1.1
```

Answer to the question no - 02

For image: IMG20240925211600.jpg

```
Profile Date Time            : 2018:06:24 13:22:32
Profile File Signature       : acsp
Primary Platform             : Apple Computer Inc.
CMM Flags                    : Not Embedded, Independent
Device Manufacturer          : Unknown (OPPO)
Device Model                 :
Device Attributes            : Reflective, Glossy, Positive, Color
Rendering Intent             : Perceptual
Connection Space Illuminant  : 0.9642 1 0.82491
Profile Creator              : Apple Computer Inc.
Profile ID                   : 0
```

For image: IMG20240925221834.jpg

```
Profile Date Time            : 2018:06:24 13:22:32
Profile File Signature       : acsp
Primary Platform             : Apple Computer Inc.
CMM Flags                    : Not Embedded, Independent
Device Manufacturer          : Unknown (OPPO)
Device Model                 :
Device Attributes            : Reflective, Glossy, Positive, Color
Rendering Intent             : Perceptual
Connection Space Illuminant  : 0.9642 1 0.82491
Profile Creator              : Apple Computer Inc.
Profile ID                   : 0
```

Answer to the question no - 03

For image: IMG20240925211600.jpg

```
Image Width          : 3000
Image Height         : 4000
Encoding Process     : Baseline DCT, Huffman coding
Bits Per Sample      : 8
Color Components     : 3
Y Cb Cr Sub Sampling : YCbCr4:2:0 (2 2)
Aperture             : 1.7
```

For image: IMG20240925221834.jpg

```
Image Width               : 3000
Image Height              : 4000
Encoding Process          : Baseline DCT, Huffman coding
Bits Per Sample           : 8
Color Components          : 3
Y Cb Cr Sub Sampling      : YCbCr4:2:0 (2 2)
Aperture                  : 1.7
```

Answer to the question no - 04

For image: IMG20240925211600.jpg

```
ract)
Image Width               : 3000
Image Height              : 4000
Encoding Process          : Baseline DCT, Huffman coding
Bits Per Sample           : 8
```

For image: IMG20240925221834.jpg

```
ract)
Image Width               : 3000
Image Height              : 4000
Encoding Process          : Baseline DCT, Huffman coding
Bits Per Sample           : 8
```

Answer to the question no - 05

For image: IMG20240925211600.jpg

```
Aperture                            : 1.7
Image Size                          : 3000×4000
Megapixels                          : 12.0
Scale Factor To 35 mm Equivalent: 0.8
Shutter Speed                       : 1/50
Create Date                         : 2024:09:25 21:16:00.871
Date/Time Original                  : 2024:09:25 21:16:00.871+06:00
Modify Date                         : 2024:09:25 21:16:00.871
Circle Of Confusion                 : 0.035 mm
Field Of View                       : 154.9 deg
Focal Length                        : 4.7 mm (35 mm equivalent: 4.0 mm)
Hyperfocal Distance                 : 0.37 m
Light Value                         : 6.9
```
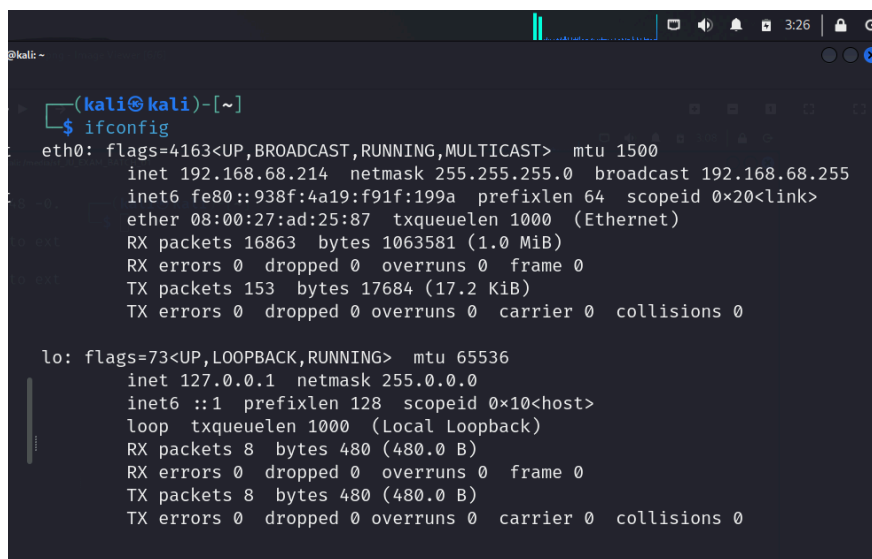
For image: IMG20240925221834.jpg

```
ract)
Image Width                      : 3000
Image Height                     : 4000
Encoding Process                 : Baseline DCT, Huffman coding
Bits Per Sample                  : 8
Color Components                 : 3
Y Cb Cr Sub Sampling             : YCbCr4:2:0 (2 2)
Aperture                         : 1.7
Image Size                       : 3000×4000
Megapixels                       : 12.0
Scale Factor To 35 mm Equivalent: 0.8
Shutter Speed                    : 1/17
Create Date                      : 2024:09:25 22:18:34.529
Date/Time Original               : 2024:09:25 22:18:34.529+06:00
Modify Date                      : 2024:09:25 22:18:34.529
Circle Of Confusion              : 0.035 mm
Field Of View                    : 154.9 deg
Focal Length                     : 4.7 mm (35 mm equivalent: 4.0 mm)
Hyperfocal Distance              : 0.37 m
Light Value                      : 1.1
```

Case-02

Answer to the question no - 01

Nmap is short for Network Mapper. It is an open-source Linux command-line tool that is used to scan IP addresses and ports in a network and to detect installed applications.

Answer to the question no - 02

```
(kali㉿kali)-[~]
$ ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 192.168.68.214  netmask 255.255.255.0  broadcast 192.168.68.255
        inet6 fe80::938f:4a19:f91f:199a  prefixlen 64  scopeid 0×20<link>
        ether 08:00:27:ad:25:87  txqueuelen 1000  (Ethernet)
        RX packets 16863  bytes 1063581 (1.0 MiB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 153  bytes 17684 (17.2 KiB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING>  mtu 65536
        inet 127.0.0.1  netmask 255.0.0.0
        inet6 ::1  prefixlen 128  scopeid 0×10<host>
        loop  txqueuelen 1000  (Local Loopback)
        RX packets 8  bytes 480 (480.0 B)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 8  bytes 480 (480.0 B)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0
```

Answer to the question no - 03


```
┌──(root💀kali)-[~]
└─# nmap -sS 192.168.68.216
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-10-05 03:29 EDT
Nmap scan report for 192.168.68.216
Host is up (0.0049s latency).
Not shown: 991 closed tcp ports (reset)
PORT     STATE SERVICE
22/tcp   open  ssh
80/tcp   open  http
139/tcp  open  netbios-ssn
143/tcp  open  imap
443/tcp  open  https
445/tcp  open  microsoft-ds
5001/tcp open  commplex-link
8080/tcp open  http-proxy
8081/tcp open  blackice-icecap
MAC Address: 00:0C:29:2C:A7:B1 (VMware)

Nmap done: 1 IP address (1 host up) scanned in 0.89 seconds
```

Answer to the question no - 04


```
┌──(root💀kali)-[~]
└─# nmap -sS 192.168.68.216 -p 80 -sV
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-10-05 03:32 EDT
Nmap scan report for 192.168.68.216
Host is up (0.0052s latency).

PORT   STATE SERVICE VERSION
80/tcp open  http    Apache httpd 2.2.14 ((Ubuntu) mod_mono/2.4.3 PHP/5.3.2-1
ubuntu4.30 with Suhosin-Patch proxy_html/3.0.1 mod_python/3.3.1 Python/2.6.5
mod_ssl/2.2.14 OpenSSL ... )
MAC Address: 00:0C:29:2C:A7:B1 (VMware)

Service detection performed. Please report any incorrect results at https://n
map.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 7.29 seconds
```

Answer to the question no - 05

```
┌──(root㉿kali)-[~]
└─# nmap -sS 192.168.68.216 -p 80 -sV -O
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-10-05 03:33 EDT
Nmap scan report for 192.168.68.216
Host is up (0.0042s latency).

PORT    STATE SERVICE VERSION
80/tcp open  http    Apache httpd 2.2.14 ((Ubuntu) mod_mono/2.4.3 PHP/5.3.2-1
ubuntu4.30 with Suhosin-Patch proxy_html/3.0.1 mod_python/3.3.1 Python/2.6.5
mod_ssl/2.2.14 OpenSSL ... )
MAC Address: 00:0C:29:2C:A7:B1 (VMware)
Warning: OSScan results may be unreliable because we could not find at least
1 open and 1 closed port
Device type: general purpose
Running: Linux 2.6.X
OS CPE: cpe:/o:linux:linux_kernel:2.6
OS details: Linux 2.6.17 - 2.6.36
Network Distance: 1 hop

OS and Service detection performed. Please report any incorrect results at ht
tps://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 8.76 seconds
```