**Q1**: How can you find this (kali) machine's IP?

With the command **ip a : 10.0.2.15**A computer screen shot of a computer program

Description automatically generated

**Q2**: How can you find this (Metasploitable 2) machine's IP?  
With the command **ip a : 10.0.2.4**A screenshot of a computer program

Description automatically generated

**Q3**: How can you find this machine's OS as well as the services and their software versions running on open ports on this machine from your Kali VM?

machine's OS:

Using the -O option, machine OS can be found near the bottom of the screenshot.

A screenshot of a computer

Description automatically generated

services:

Using the -PS option we can list all the services and their port.

A screenshot of a computer

Description automatically generated

software versions:

Using the -sV option and specifying port 3306 with the option -p3306 we can find the software using port 3306 and it’s version.

A screen shot of a computer

Description automatically generated

**Q4**: What's the use case when we need to use -Pn probing option with nmap?

When a network is blocking ping probes, using the option -Pn can be used to by pass it.

A computer screen shot of a computer screen

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