**Task 2.1A: Understanding How a Sniffer Works**

**1.** Function calls that are used for sniffing programs include;

* Determining and setting the type of ethernet interface that the program will use
* The initialization of the PCAP to create a session.
* The call to set traffic filtering rules, this ensures that the type of traffic sniffed on an interface is the type one is going for.
* The execution of the sniff.

**2.** In Linux we need root access everytime network interfaces need to be access. The program needs the ability to utilize raw sockets to send packets. Without the root access, it wont be possible to access the network interface and to utilize raw sockets.

**3.** With promiscuous mode set to 0 we could not sniff other devices packets on the net and the machine running the sniffer code will only get packets tied with the machine self IP.