CIS/CSE644: quizz1a student name:

1(10): How to get the address in C language? such as how to get address from normal integer variable?

Int i =10;

Address of i= ?

If you want to use a pointer to hold the value of this address, now first try to declare a pointer(what type?) and use it to save the address of i. Then print out the value of (int i ) using this pointer you just declared. (do not need a compiling code, just the major lines.

2:(10) what does “ (int\*) &a “ mean: ( “a” can be any type except integer type).

3: (10)

char **buffer**[LENGTH];

struct ipheader \***ip** = (struct ipheader \*) buffer;

struct udpheader \***udp** = (struct udpheader \*) (buffer + sizeof(struct ipheader);

Char \***data** = buffer + sizeof(struct ipheader) + sizeof(struct udpheader);

explain above code, what they are doing? also what is type casting in C language?

3b(5): what is the return of sizeof(); in what unit?

4:(10) steps you need to think about in order to write sniffer? reasons for each step.(briefly)

4b:(10) what is promiscuous mode? What is normal mode? How do these two modes make difference in sniff tool? What is necessary for sniffing and why?

5:(10) what is raw socket? Why Prof. Du spend time talking about raw socket? What is special about raw socket?

5b(5): what is critical in the function: send\_raw\_ip\_packet()? (without it, the packet will not be sent), and explain the reason?

6:(10) relationship between raw socket programming and pcap library programming? Why do we need the root privilege to run?