

Week 1

Question 9.

int x; // variable at address 1000 with initial value 0.
int *p; // variable at address 2000 with initial value 0.

statement	x value	p value (p points to)	x address	p address
initial. -	0	0	1000	2000
a. p = &x;	0	1000	1000	2000
b. x = 5;	5	1000	1000	2000
c. *p = 3;	3	1000	1000	2000
d. x = (int)p;	1000	1000	1000	2000
e. x = (int)&p;	2000	1000	1000	2000
f. p = NULL;	? 2000	NULL	1000	2000
g. *p = 1;	fail	because p is NULL		

&p = 2000

2000 | P 1000

1000 | x 5

Question 6.

when to use * and/or malloc for structs?
struct node a;

see code
a.b.

struct node * b;

what does malloc do?

Struct
can hold different
variable types

fields are
accessed by
names

Array
only one
type

fields are
accessed by
indexes