Week 6 Assignment

Programming for computer engineering

(E22.285191U013.A)

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1) Consider the following program fragment:

```
int x;
int y;
int z;
int* w;
int* q;
x = 0;
y = 1;
z = 2;
w = &x;
q = &y;
*w = y;
*q = z;
*w = x + y + z + *q;
*q = x + y + z + *w;
printf("x=%d, y=%d, z=%d",x,y,z);
```

What does the program print when executed?

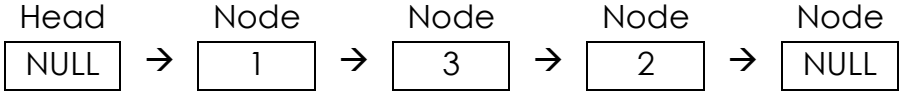
Answer: 7, 18, 2

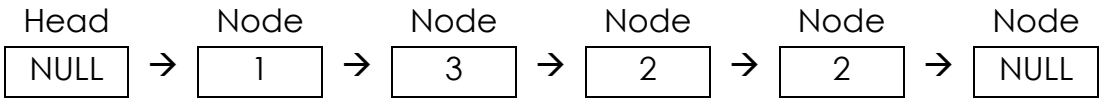
2) Write a function int max (int* numbers, int size) that, given an array of numbers (and its size), find the maximum value in the array.

See GitHub code

3) Consider the following program

a) Draw two diagrams that shows list at /*show list here'/ in main.





b) Implement a function with the following signature: int size (node *1).

See GitHub code

c) What does the following code do when executed?

It doesn't print the values of the list, it only prints data. We need a parameter in the while loop that checks the next value. We are missing p = p -> next in the while loop.

d) Correct the function above so that the post condition is fulfilled

See GitHub code

e) Write a function int largest (node *l).

See GitHub code