Week 6

Exercise 1

The program prints following

Answer: x = 7, y = 18, z = 2

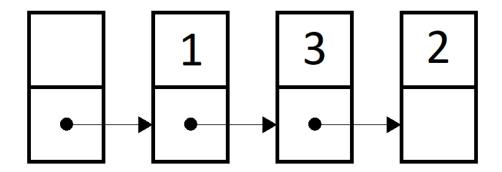
Exercise 2

Look at code

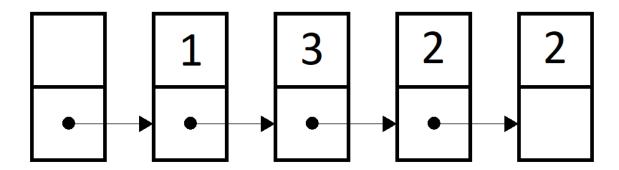
Exercise 3

a)

First diagram:



Second diagram:



b)

Look at code

c)

The while loop is missing some code that updates the pointer p, so it points to the next element. When it runs while(p!=NULL) it doesn't update p in the while loop, so if the condition is met, it would keep printing p->data in the current element. Which means it wouldn't meet the post condition of printing the values of the list.

d)

The function is corrected in the code. A line: p = p->next is added in the loop to make it update p so it points to the next element every time it goes through the loop, until p=NULL

e)

Look at code