Assignment 4

Question 1

```
let n = user input;
let sum = 0;
let count = 0;
while count < n:
    count++;
    sum = sum + count;
return sum
```

Question 2

```
Print "Enter a positive number: "
let x = user input 1
if x < 1:
    prompt again
print "Enter another positive number: "
let y = user input 2
if y< 1:
    prompt again

while (x != y):
    if (x > y):
        x = x-y
    else
        y = y-x
return x
```

Question 3

```
let n = user input
if n<2 :
    return "Please enter a number >=2"
    prompt again
else:
    let x=0
    let y=1
    let z
    for i=2; i<n; i++ : # because fib(1)=0, fib(2)=1, etc.
        z = x+y
        x = y
        y = z
    return y
```

★ assumption: fib(1) = 0
fib(2) = 1
fib(3) = 1
fib(4) = 2
...

Question 4

```
let n = user input

if (n<0):
    n = 2^32 + n  # convert negative n to 2's complement representation

let hex-rep = convertToHex(n)

print "0x" + formatAs8DigitHex(hex-rep)
```