

AP COMPUTER SCIENCE A – OVERFLOW

1) a) Run the program `OverFlow` which is listed here.

```
public class OverFlow {  
    /**/  
    public static void main ( String [] arg ) {  
        /**/  
        int x, y;  
        /**/  
        x=0x7fffffff;  
        y=x+1;  
        /**/  
        System.out.println();  
        System.out.println( "      x = " + x );  
        System.out.println( "y = x+1 = " + y );  
        /**/  
        return;  
    }  
}
```

b) What is the output?

$x = ?$

$y = ?$

c) What is wrong?

2) Recall that the first nine Fibonacci numbers are

0 1 1 2 3 5 8 13 21.

Each Fibonacci number is obtained by adding the two previous ones. Program `FibonacciNumber` calculates the 93rd and 94th Fibonacci numbers.

a) Run program `FibonacciNumber`.

b) What is the output?

93rd Fibonacci Number = ?

94th Fibonacci Number = ?

c) What is wrong?