Hunter Poole
CSCI 155 HW5, Problem 2

2) Write a program that displays the first 40 Fibonacci numbers. A Fibonacci number is created by add the previous two, with the first two always being 0 and 1. A partial sequence is as follows: 0, 1, 1, 2, 3, 5, 8, 13, 21,.... Your table must display 6 numbers per row and use a spacing of 10 for each number. Don't forget to look at handout on formatting output and probably use "printf()".

Three Step Analysis:

A. Initialize two int variables at 0 & 1.
B. Add them, display result.
C. Write variable 2 into variable 1.
D. Write result into variable 2.
E. Add them, display result.
F. Repeat B-E for a total of 40 outputs.

INPUT	**OUTPUT**	**EQUATIONS**
	Fibonacci sequence, first 40 numbers.	**for** (i = 39; i > 0; i--)
	0, 1, 1, 2, 3, 5, 8, 13, 21,...	Num3 = Num1 + Num2
		if ((i + 1) % 6 == 1)

G. Limits / Constraints:
    a. Must have six numbers on a line
    b. Numbers must have spacing of 10
    c. Must go only to the 40th fibonacci number
        i. 102334155
        ii. Counted 0 as 0, 1 as 1, 2 as 1.
            1. https://planetmath.org/listoffibonaccinumbers

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```
int i, Num1 = 0, Num2 = 1, Num3

write Num1, Num2

for (i = 39; i > 0; i--)
        Num3 = Num1 + Num2
        write Num3

        Num1 = Num2
        Num2 = Num3

        if ((i + 1) % 6 == 1)
                write (%n)
        end if
end for
```