

Computing Homework 09/10/13

Objective: Create a code in C that will input a number up to 100 and return a roman numeral.

How to do this: The main concept is that I will use while loops to subtract from the original number and add what I subtracted to the roman numeral output. So, I would check for 100, then 90, then any number of 10's between 90&50, then 50, then 40, then any number of 10's between 40 & 10, then all the numbers below 10.

How to test it:

I will write a file with these numbers:

100
99
95
90
85
51
49
40
39
38
1

And then open the program with this text:

`./a.out < numbers.txt`

Which will then call `conversion()` with every number in the file.

If the test works, it will output this:

100=C
99=XCIX
95=XCV
90=XC
85=LXXXV
51=LI
49=XLIX
40=XL
39=XXXIX
38=XXXVIII
1=I

Results of testing:

After testing, this was the output:

```
Gavins-iMac-5:Desktop samuel$ ./a.out < numbers.txt
Welcome to the roman numeral generator! Please type in a number to begin.
100=C
99=XCIX
95=XCV
```

90=XC
85=LXXXV
51=LI
49=XLIX
40=XL
39=XXXIX
38=XXXVIII
1=I

We can therefore assume that my roman numerals program works.
After finding that my program works with any number up to 399, I then added to it so that it
was accurate up to 3999.