

## CMPE 230 Systems Programming

### Project (due March 20th)

( This project can be implemented in groups of at most two students. )

In this project, you will implement an A86 assembly language program that will input postfix expression involving hexadecimal quantities and evaluate it. After evaluation, the result should be output. Here are some example inputs to the program and the outputs generated:

input	output
2 3 + 4 5 + * 2 /	16
A B C + 2 + *	FA
1 2 4 + + FFFF ^	FFF8

The following operations will be supported.

operation symbol	meaning
+	addition
*	multiplication
/	integer division
^	bitwise xor
&	bitwise and
	bitwise or

You can make the following assumptions:

- The input tokens are separated by a blank character.
- The postfix expression given is syntactically correct.
- All values and results of operations will be 16 bit values.

### Grading

Your project will be graded according to the following criteria:

Documentation (written document describing how you implemented your project)	12%
Comments in your code	8%
Implementation and tests	80%

### Late Submission

If the project is submitted late, the following penalties will be applied:

- 0 < hours late <= 24 : 25%
- 24 < hours late <= 48 : 50%
- hours late > 48 : 100%

### Timestamping

Project file should include your names in it. Please timestamp your project file using <https://opentimestamps.org/> before you submit it. Keep the project file and its corresponding timestamp .ots file.