**CSE 102**

**Offline Assignment (LOOP)**

1. Continually take input unless a negative number is given. Input will be only 0/1. That is actually binary representation of a number. You have to determine the decimal representation and total number of digits in decimal representation of that number. Input order MSB to LSB. You CANNOT use array for this.

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| --- | --- |
| **Sample Input** | **Sample Output** |
| 1 0 0 1 0 **-1** | 18 2 |
| 0  1  0  1  0  1  -1 | 21 2 |

1. You have to process a mathematical expression and output the result. The expression contains three types of input: single digit number, plus sign (‘+’) and multiplication sign (‘\*’). The precedence of ‘\*’ is greater than ‘+’ as followed by any standard system. The expression ends with the minus sign (‘-‘) which will not be considered as the part of the expression but to mark the end of the expression. There must be at least one single digit number followed by the compulsory “-“ sign. You CANNOT use array for this.

|  |  |
| --- | --- |
| **Sample Input** | **Sample Output** |
| 1+2\*2\*3+5- | 18 |
| 1- | 1 |
| 1+2\*2- | 5 |

**Deadline:** 11:55 PM, 7/5/18 (Monday)

**Submission:** Make two separate C files for each of the problems. The name of the files should be like 1705xyz\_Problem1.c and 1705xyz\_Problem2.c . Make a folder named “1705xyz” where should put only the two C files . Now zip the folder. Finally upload the zip file to the submission link of the moodle within the deadline. [Note that, you should replace xyz with the last three digits of your student id]