

## CSE 102 Assignment #2 (A1)

1. Take an integer n and print the Fibonacci series upto n.

Sample input	Sample output
20	0 1 1 2 3 5 8 13
40	0 1 1 2 3 5 8 13 21 34
2	0 1 1 2

2. In this problem, your input is a real number x, which represents an angle in degree. You need to apply McLaurin series expansion to compute the value of  $\cos x$ . Terminate your summation when the absolute value of the nth term is less than  $10^{-4}$ . Print 6 digits after the decimal point in your output. Recall that, the expansion is as follows (where x is expressed in radian):

$$\cos x = 1 - \frac{x^2}{2!} + \frac{x^4}{4!} - \dots$$

Sample input	Sample output
60	0.500000
85	0.087156
90	0.000000
-150	-0.866025

3. Take input two nonzero integers and output the greatest common divisor (GCD) and least common multiplier (LCM) of the two numbers.

Sample input	Sample output
12 18	6 36
6 5	1 30
3 18	3 18

Submission Deadline: May 9, 2018 (11:00 AM)

Bring the .c files in a pendrive in lab.