

Python Practical III

Deadline for submission: 21st September 2021, 3pm

Q1 Write python code to check whether a number entered by the user is an evil number or not.

(An evil number is a non-negative number that has an even number of 1s in its binary expansion.)

Sample Input: 3

Output : Evil Number

Explanation: Binary expansion of 3 is 11,
the number of 1s in this is 2 i.e even.

Input : 16

Output : Odious Number(not an evil number)

Explanation: Binary expansion of 16 = 10000,
having number of 1s =1 i.e odd.

Q2 Write a function to print even factors of a number. The number should be taken as a user input.

Sample Input: 18

Output:

Even factors of 18 are:

2

6

18

Q3 Write code to print the number of vowels, consonants, uppercase, lowercase characters in string entered by the user.

Q4 Write a function to find the sum of the series:

$[1+(1+2)+(1+2+3)+\dots+(1+2+3+\dots+n)]$.

Take the value of n as input from the user.