COAL FALL 2021
BSCSF20
Lab # 5

You are required to prepare the ASM file of each task.

Task 1:

Write a program that will

a) Prompt the user to enter a hex number of four digits or less, if the user enters an illegal character, he or she should be prompted to begin again. Accept only uppercase letters.
b) On the next line prints it in binary

Your program ignores any input beyond four characters.

Sample execution:

Enter a hex number (0 to FFFF): **1a**
Illegal hex digit, try again: **1ABC**
In binary it is: 0001101010111100

Task 2:

Write a program that will

a) Prompt the user to enter a binary number of 16 digits or less, if the user enters an illegal character, he or she should be prompted to begin again.
b) On the next line prints it in Hex

Your program ignores any input beyond 16 characters.

Sample execution:

Enter a binary number up to 16 digits: **11100001**
In Hex it is E1

Task 3:

Write a program that will:

a) Prompt the user to enter 2 binary numbers of 8 digits each, if the user enters an illegal character, he or she should be prompted to begin again.
b) On the next line prints it sum in binary

Sample execution:

Enter a binary number up to 8 digits: **11001010**

Enter a binary number up to 8 digits: **10011100**

The binary sum is: 101100110

Task 4

Write an Assembly Language Program to
(a) Read a number in binary form,
(b) Display a number in hexadecimal form,
(c) Display Reverse hexadecimal pattern of the number
[Use procedures (functions) for each part]

Sample execution:

Enter a Binary Number: **10011101**
Hexadecimal number is: 9B
Hexadecimal number in reverse pattern is: B9