

# COAL FALL 2021

## BSCSF20

### Lab # 4

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

#### Task 1:

Write an Assembly Language Program that reads a string of characters terminated by CR [enter key] and display it in reverse order.

##### Sample execution:

Enter a String: **School**

In reverse order: loohcS

#### Task 2:

Write an Assembly Language Program that reads a string of characters terminated by CR and display the count of vowel character [ assume that the number of vowel character in string are less than 10]

##### Sample execution:

Enter a String: **COAL is interesting subject.**

Vowel Character are: **9**

#### Task 3:

Write a program that will

- Prompt the user to enter a character
- On the next line prints its ASCII code in binary
- The number of 1 bit in its ASCII code.

##### Sample execution:

Enter a character: **A**

The ASCII code of **A** in binary is 01000001

The number of 1 bit is 2

#### Task 4:

Write a program that will

- Prompt the user to enter a character
- On the next line prints its ASCII code in HEX
- Repeat this process until the user type a carriage return

##### Sample execution:

Enter a character: **Z**

The ASCII code of **Z** in HEX is 5A

Enter a character: **A**

The ASCII code of **A** in HEX is 41

Enter a character:

**Task 5:**

Write an Assembly Language Program that reads a string of characters terminated by CR and display it's all words with reverse order.

**Sample execution:**

Enter a String: **COAL is interesting subject**

Now String is: **LAOC si gnitserstni tcejbus**