# Computer Organization and Assembly Language <u>Assignment No.3</u> Total: 100 Marks

Section: A,B,C Due Date: 8<sup>th</sup> – May- 2023 (11:55 PM)

### **Question #1**

Write a MIPS assembly program that takes ten input of positive numbers only, place them in an array. Find the minimum number, maximum number and average. Prompt the user properly and also ask for the number again if user enters a negative number or a character.

## **Question #2**

Write a MIPS assembly program that takes an input from the user character by character of a string until enter is pressed. Count the number of capital characters and store them in a variable named count. (No need of display)

# **Question #3**

```
Write a MIPS assembly program to calculate the sum of the series (1*1) + (2*2) + (3*3) + (4*4) + (5*5) + ... + (n*n).
```

```
Sample Output:
```

```
Input the value for nth term: 5

1*1 = 1

2*2 = 4

3*3 = 9

4*4 = 16

5*5 = 25
```

#### **Question #4**

Write a MIPS assembly program to display the n terms of odd natural number and their sum.

```
Sample Output:
Input number of terms: 5
The odd numbers are: 1 3 5 7 9
The Sum of odd Natural Numbers upto 5 terms: 25
```

### **Question #5**

Convert the **Question#1** into a procedure that takes array address and size of array as arguments and outputs minimum, maximum and average of the array elements.