



Midterm (***CSE331.3 – Asif Ahmed Neloy\_Fall'19***)

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*Time 90 minutes, Marks 100 (You need to answer all questions).*

***Name -***

***ID -***

**1. Explain LEA and Offset [2]**

**2. What is the difference between Data Segment and .Data?[3]**

3. Explain the following - **ASSUME DS:DATA CS:CODE[5]**

4. Write down the syntax of the following instructions -  
**[10]**

- **LEA**
- **ADC**
- **CMP**
- **NOT**
- **TEST**

**Programs:**

1. Write a program in assembly language that can convert any lower-case letter to upper case and also any upper-case letter to lower case. [20]

**Example:**

Enter a letter: A

The letter in Upper Case is: A

The letter in Lower Case is: a

2. Write a program in assembly language that can convert test if a number is even or odd (from 0-9). [20]

**Example:**

Enter an integer: 8

The integer is : EVEN

3. Write a program in assembly language that can Read a string with gaps and print it. [20]

**Example:**

Enter a String: Boring Lab

The integer is: Boring Lab

4. Write a program in assembly language that will show the following outputs. Use only loop. [20]

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