

**MNIT Jaipur**  
**Systems Programming Lab.**

*Assignment No.: 4*

*Batch: All*

*Due Date: 15/02/2016*

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Check the assembly code given in "**t2-2.s**". In the given code, the variables can be stored between **8(%esp)** to **28(%esp)**. For example, there are three variables given in the code, **20(%esp)**, **24(%esp)**, and **28(%esp)**, which are initialized to **10**, **0** and **4**. The method uses **printf()** to print the value finally stored in memory **28(%esp)**.

(refer to the code:

```
movl $.LC0, %eax
movl 28(%esp), %edx
movl %edx, 4(%esp)
movl %eax, (%esp)
movl $0, %eax
```

).

Other parts can be ignored for the purpose of this assignment.

Modify the code such that it computes the following problems and print the result. (prepare the codes individually from the given assembly file)

1. Without using **MUL** or **ADD**, perform multiplication of **Three** elements.
2. Compare values of the three variables and print them in descending order. You should modify "**printf**" call so that the three variables can be printed in a single call in the following order:

**Largest = %d, Medium = %d, Smallest = %d.**