

## Computer Organization and Assembly Language

### Assignment 2

(Deadline: 16<sup>th</sup> November, 2020 10:00 PM)

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**Submission:** Combine all your work (solution folder) in one .zip file. Name the .zip file as ROLL\_NUM\_A\_02.zip (e.g. 201-0001\_A\_02.zip). Submit zip file on GCR within given deadline. Failure to submit according to above format would result in deduction of 10% marks.

**Comments:** Comment your code properly. **Bonus marks (maximum 10%)** will be awarded to well commented code.

**Deadline:** Deadline to submit assignment is **16<sup>th</sup> November, 2020 10:00 PM**. No submission will be considered for grading outside GCR or after **16<sup>th</sup> November, 2020 11:50 PM**. Correct and timely submission of assignment is responsibility of every student; hence no relaxation will be given to anyone.

**Plagiarism:** **-50% marks** in the assignment if any significant part of assignment is found plagiarized. A code is considered plagiarized if **more than 20%** code is not your own work.

1. Write a program that displays two character (i.e., character 1 and character 2) of your choice at the middle row of the screen. One character is on the left most side, and other one is at the right most side of the same row. Write a program that moves character 1 to the right, and moves character 2 to the left. Your program should stop when both the characters are adjacent to each other.
2. Using the same logic as described in Q1, write a subroutine that takes, as an input, the hexadecimal number of type word, and displays its binary at the middle of the middle row.

**Good Luck!**