AHSANULLAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

Department of Computer Science and Engineering Program: Bachelor of Science in Computer Science and Engineering

Fall 2019 Year: 2nd Semester: 2nd

Course No: CSE 2214 Course Title: Assembly Language Programming

Assignment on Representation of Numbers and Characters

Read the "Assignment Submission Guideline" from Google Classroom for detailed instruction on the assignment submission process. Also note that only the submissions submitted within the deadline time will be accepted and evaluated based on oral examination in the next class.

- 1. Suppose that a byte contains the ASCII code of a lower case letter. What hex number should be added to/subtracted from it to convert it to upper case?
- 2. For each of the following 16-bit signed numbers, tell whether it is positive or negative.
 - a. 9AC4h
 - b. 78E3h
- 3. Give the unsigned and signed decimal interpretations of each of the following 16-bit or 8-bit numbers.
 - a. 7FFEh
 - b. A9h
- 4. Perform the following additions.
 - a. 00101b + 10111b
 - c. 100111101b + 10001111001b
 - d. B23CDh + 17912h
 - e. FEFFEh + FBCADh