Course Code: EE-2003	**Course Name:** Computer Organization & Assembly Language
Course Teacher: Shoaib Rauf	**Assignment No:** 01

Instructions:

- You are required to Submit Assignment in hardcopy and also upload scanned copy on Google classroom.
- The deadline for submission is **Sunday October 10, 2021**
- **Copying is not allowed at all.** Any similarities among the submitted files of any student will result in **zero marks**.

CLO #01 & 02   Total Points: 24

1. Explain the roles of Compiler and OS in executing a HLL (High Level Language) program from a text file. Why is the process of Linking performed?

2. Explain the contents of Segment registers in Real memory addressing mode and Protected mode.

3. Find the missing value (directed by "?");
   a) Segment: AB0E h
   Offset: 5D89 h
   Real Address: ?

   b) Segment: 8FE3 h
   Offset: ?
   Real Address: A835F h

   c) Segment: ?
   Offset: 5E6D h
   Real Address: FF41D h

   d) Segment: ?
   Offset: ?
   Real Address: A5B6D h

4. Explain in your words, why .class file of JAVA is platform independent; whereas executable file (Machine Code) generated on Java is platform dependent?

5. Discuss the similarities and differences between real-address mode and virtual-8086 mode.

6. Explain the purpose of control flags and status flags.