CS230 In-Video Quiz **Lecture 2**

1. Which of the elements of the language hierarchy are machine independent (i.e., the same spec or program will run on different machines)?

   (a) Algorithms
   (b) Higher Level Languages
   (c) Assembly Language
   (d) Machine Language
   (e) Digital Logic

   Answer: (a), (b)

2. What is the entity/person responsible for converting an algorithm to an equivalent higher level language representation?

   (a) Operating System
   (b) Algorithm Designer
   (c) Programmer
   (d) Computer Architect
   (e) Compiler

   Answer: (c)

3. What is the entity/person responsible for converting a higher level language program to assembly language?

   (a) Operating System
   (b) Programmer
   (c) Compiler
   (d) Editor

   Answer: (c)

4. What is the entity/person responsible for converting assembly language code to machine language code?

   (a) Compiler
   (b) Command Line Shell

(c) Assembler

(d) Computer Architect

Answer: (c)

5. What is the entity/person responsible for converting machine language code to digital logic?

   (a) Operating System

   (b) Bill Gates

   (c) Google

   (d) He/She who takes this course

   (e) NOTA

   Answer: (d)

6. Which of the steps of conversion is this Computer Architecture course concerned about? Select all that apply.

   (a) Problem specification to algorithm specification

   (b) Algorithm specification to HLL code

   (c) HLL code to assembly language code

   (d) Assembly language to machine language

   (e) Machine language to digital logic

   Answer: (d), (e)

7. What are the major components of a computer?

   Answer: Input, Output, Memory, Data Path, Control Path