Department of Computer Science & Engineering
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Practice Sheet #01

Topic: Introduction to Digital Computer and Programming in C

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1. The program counter in the CPU is used

   (a) to store an operand
   (b) to store the address of an operand
   (c) to store an instruction
   (d) to store the address of an instruction.

2. While writing a C program, we directly interact with

   (a) Compiler
   (b) Operating system
   (c) Editor
   (d) Web browser
   (e) Linker

3. Write the octal code of the binary string 11100001.

4. Convert 101.125 (in decimal system) to the hexadecimal system. Show the steps of your answer.

5. Convert 45.75 (in hexa-decimal form) to the binary number system. Show the steps of your answer.

6. Convert the decimal number 4.75 to binary and hexadecimal.

7. Convert the decimal number 371 to binary and hexadecimal.

8. In the "fetch-decode-execute" cycle, who does what job?

9. In modern digital computer, input and output are two essential parts of a computer and there are standard input and output devices namely keyboard and VDU, respectively. Who receives input from keyboard and fed it to CPU and receives results from CPU and display them to monitor?

10. Suppose, two data *x* and *y* are declared and their values stored in the data area in main memory. What instruction in Assembly language would be to add two values in *x* and *y* and store the result in *z* (another memory location in the main memory)?

11. Why CPU cannot directly read from any secondary memory?

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