

Tutorial 3

Computer Organization

Attempt the following questions before you attend tutorial.

1. On what architecture is the modern computer based on? Briefly describe the architecture.
2. What algorithm does the control unit follow? Briefly describe the algorithm.
3. What are the 3 main registers that are used by the CPU to interact with the main memory?
4. Why do we want to have the CPU's operation overlap with that of the I/O processing?
5. What are the 2 ways in which the CPU can be notified of the completion of an I/O operation?
6. What is DMA? What information do you think the CPU needs to provide the DMA controller to issue a memory transfer operation?