DATA FLOW DIAGRAM

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DFD

A data flow diagram (DFD) is a graphical representation of the "flow" of data through an information system, modeling its process aspects. Often they are a preliminary step used to create an overview of the system which can later be elaborated. DFDs can also be used for the visualization of data processing (structured design).

A DFD shows what kinds of information will be input to and output from the system, where the data will come from and go to, and where the data will be stored. It does not show information about the timing of processes, or information about whether processes will operate in sequence or in parallel (which is shown on a flowchart).

Essentials for DFD of Intel 8085 Simulator

- INPUT
  - There are 2 types of inputs to the 8085 Simulator.
    - First type, is the source code in 8085 Assembly language.
    - Second type, is the binary code which can be Memory Dump file, Assembled binary code in Intel Hex Format, or directly editing the respective memory location with the help of a Hexadecimal code.
- DATA STORE & BACKUP
  - The source code, memory dump or assembled binary code is stored on Disk drive of the host system, in either text format or XML (Serialization) data format.
- PROCESS
  - The IDE code as text, is passed on to the inbuilt assembler, which generates the binary code , which is to be loaded into the memory.
  - Alternative, direct memory editing may result in direct execution of the binary instructions, by the Simulator Execution Engine.
- OUTPUT
  - Output of assembler is machine code in Hexadecimal format, loaded into Simulator memory, which is directly executed by the host machine.
  - Executed result is displayed on Registry Viewer, Memory Viewer, Port Viewer, or attached virtual devices.

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