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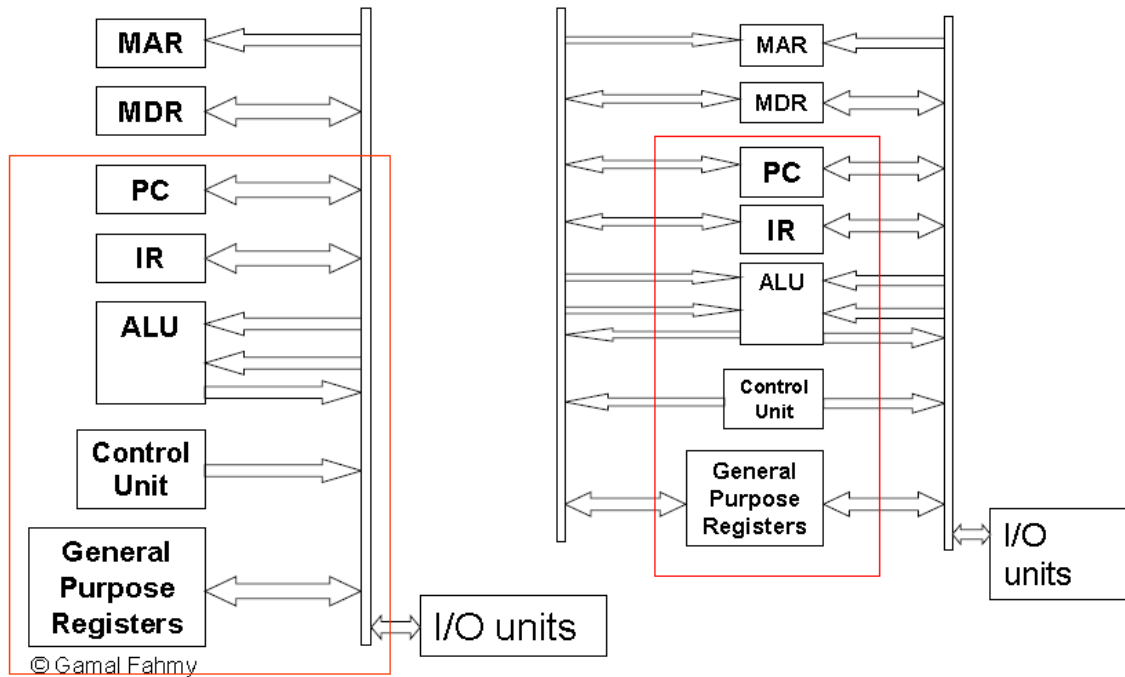
Assignment 1 sol

1. True or False

- a. ALU is responsible for storing programs and data
False
- b. The main memory is a large number of semi conductor devices (Transistors) to store data
True
- c. The MAR (Memory Address Register) and the MDR (Memory Data Register) are two registers located in the main memory responsible for data transfers
True
- d. The PC (Program Counter) is a buffer located in the Processor for data isolation
False
- e. The instruction register is the first register in the Processor that gets loaded with data for a single program
False
- f. Address bus are typically unidirectional
True
- g. Control bus carries data
False
- h. Dedicated computer buses are more complicated
False
- i. Bus arbitration means that more than one module is connected on the same bus
True
- j. Memory received and sends addresses
False

2. Illustrate with graphs the difference between the single bus structure, the two bus structure, and the multiple bus structure. Show advantages and disadvantages on each type.

Single Bus is simple but takes more time to execute any instruction, Double Bus is faster but more complicated as it needs more registers and synchronous modules



3. Define what is meant by Computer Structure, Computer Function

Structure is the way in which components relate to each other

Function is the operation of individual components as part of the structure