



Department of Computing and Information System

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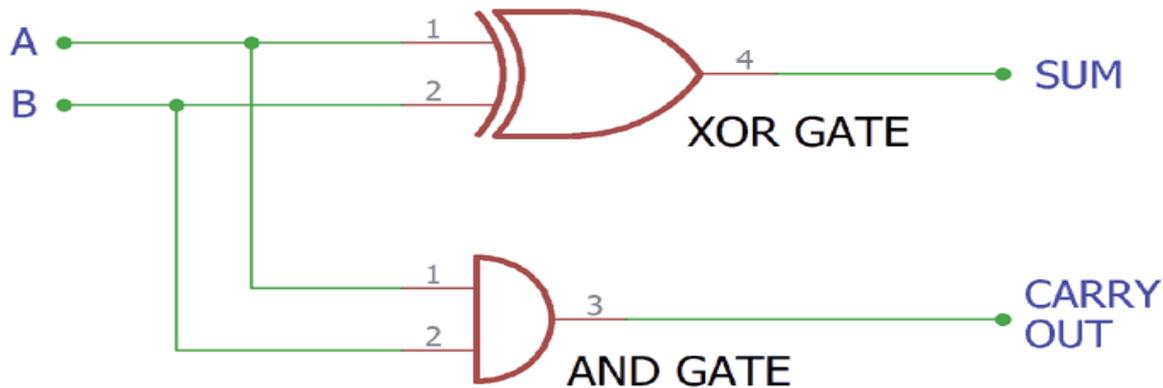
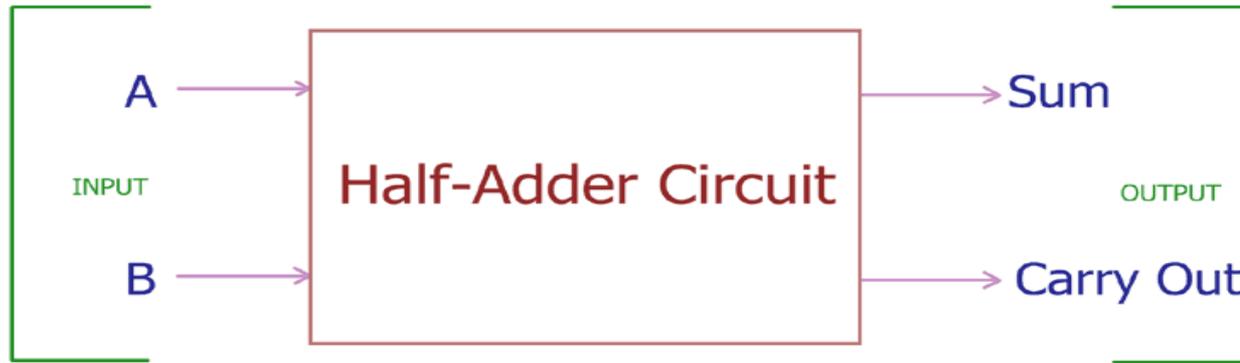
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Sequential And Combinational ALU

TYPES OF DIGITAL LOGIC CIRCUITS IN ALU

- COMBINATIONAL CIRCUITS
- SEQUENTIAL CIRCUITS

BLOCK DIAGRAM OF A COMBINATIONAL CIRCUIT



Half-Adder & Full-Adder

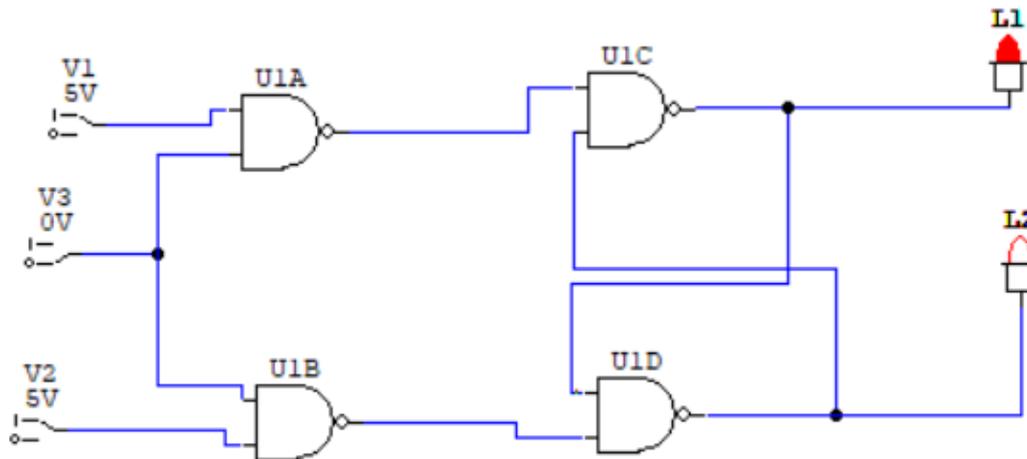
○ Half-Adder :

- A half-adder is a combinational circuit that performs the addition of two bits.

○ Full Adder :

- This type of adder is a little more difficult to implement than a half-adder.
- The main difference between a half-adder and a full-adder is that the full-adder has three inputs and two outputs.

BLOCK DIAGRAM OF A SEQUENTIAL CIRCUIT



Thanks to All