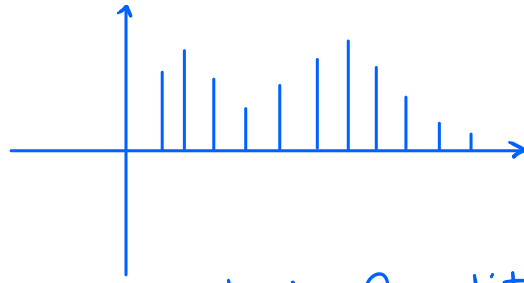


analog quantity

Continuous



digital quantity

Quantized

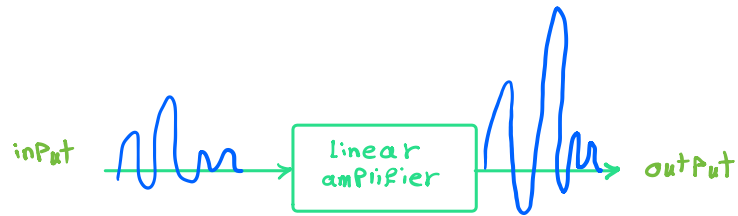


binary & voltage representation

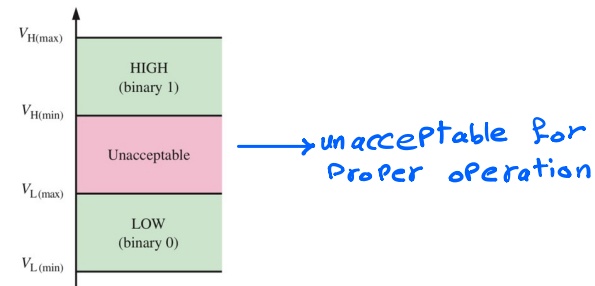
High = 1

Low = 0

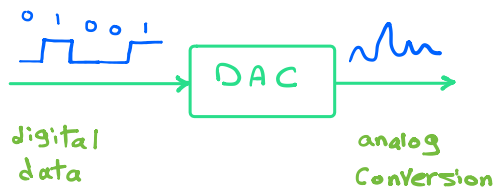
analog system :



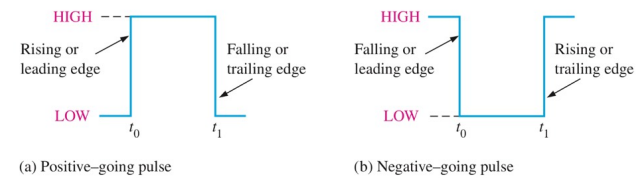
Logic levels :



digital-to-analog converter (DAC) :

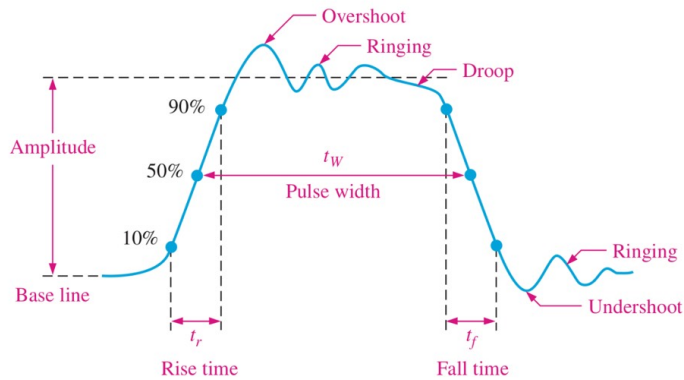


Pulse :

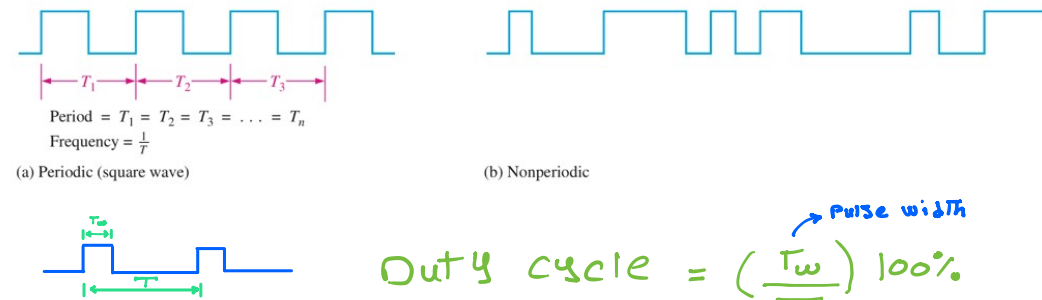


ideal pulse

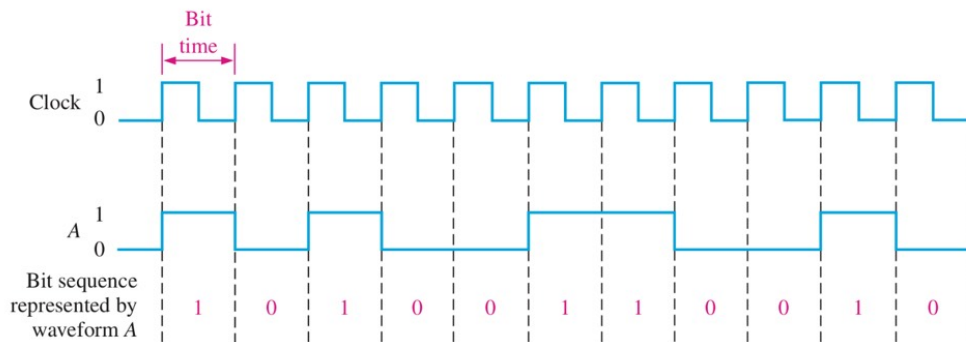
nonideal Pulse :



digital waveform :



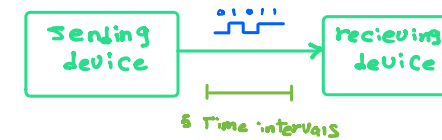
Clock :



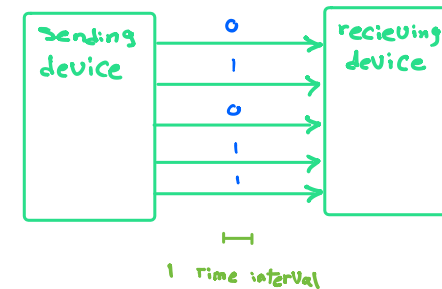
**FIGURE 1-11** Example of a clock waveform synchronized with a waveform representation of a sequence of bits.

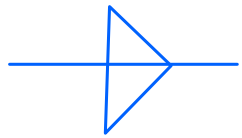
Data Transfer :

Serial

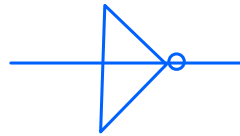


Parallel

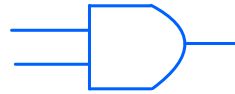




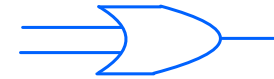
buffer



NOT

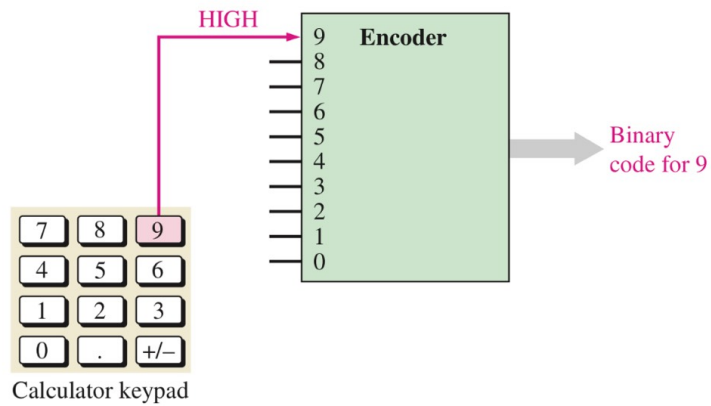


AND

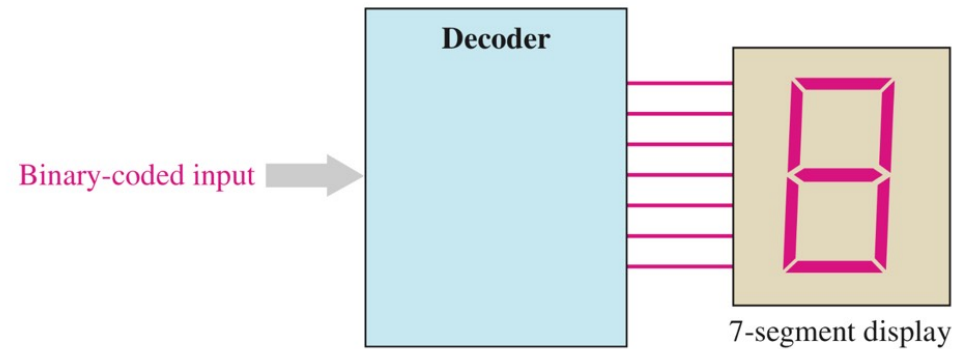


OR

Encoder :



Decoder :



Multiplexer & Demultiplexer

