



Example of Digital Signals

- ❑ Digital signals are commonly referred to as square waves or clock signals.
- ❑ Their minimum value must be 0 volts, and their maximum value must be 5 volts.
- ❑ They can be periodic (repeating) or non-periodic.
- ❑ The time the signal is high (tH) can vary anywhere from 1% of the period to 99% of the period



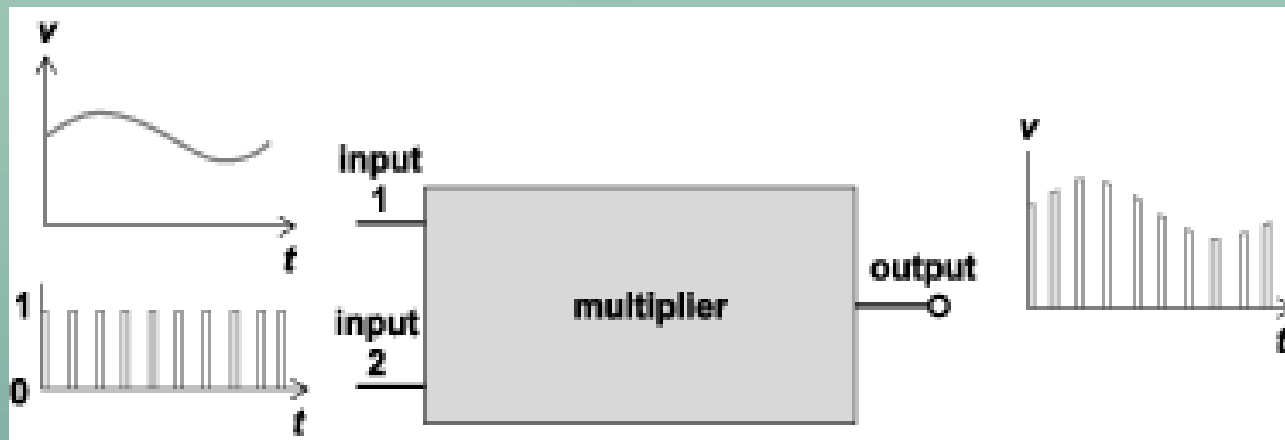
Importance of Digital Electronics

Because of the increasing use of digital computers in both data processing and automatic control system, digital electronics has a greater importance. Some of them are listed below:

- ❑ Used for wide variety of industrial and consumer products as in automated industrial machinery
- ❑ Computers used in different field
- ❑ Microprocessors, IC technology
- ❑ Calculators, Digital watches and clocks
- ❑ TV, games, Electronic systems etc

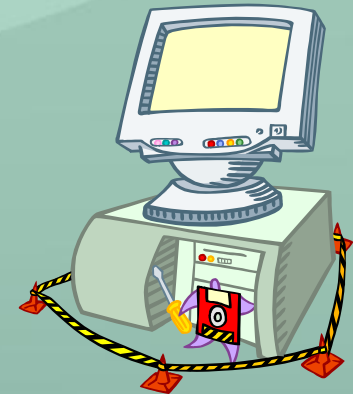
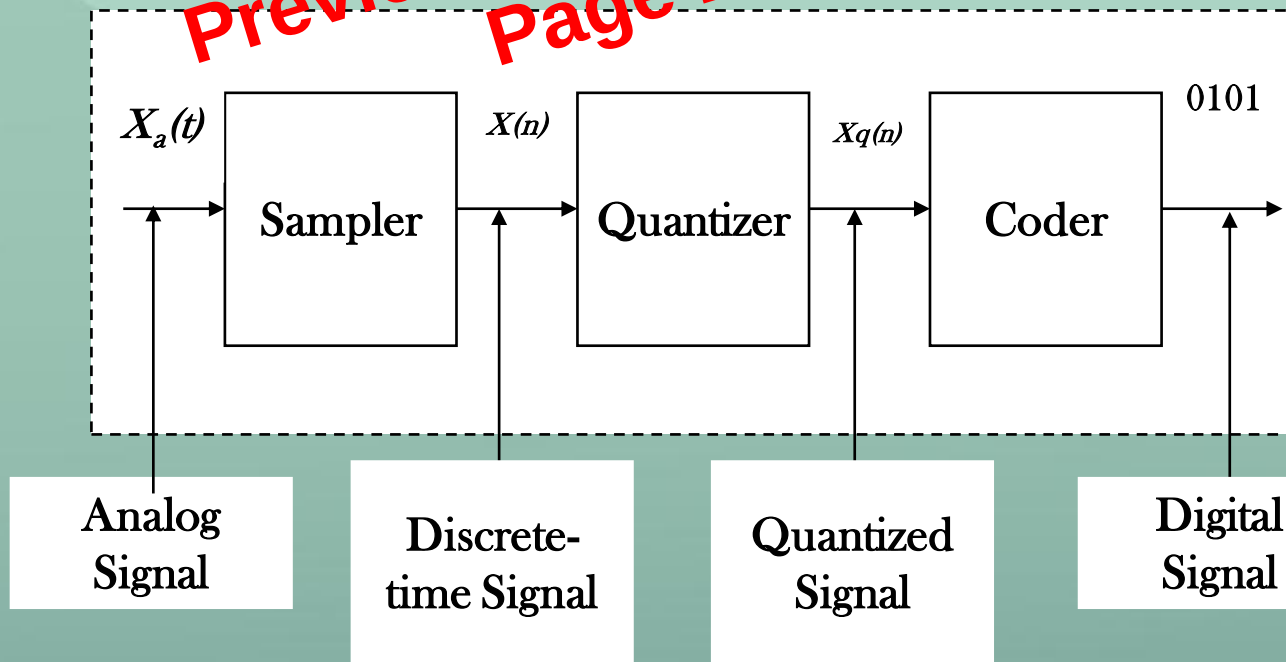
Sampling

- ❑ Conversion of a continuous-time signal into a discrete-time signal obtained by taking "samples" of the continuous-time signal at discrete-time instants. (Time discretization)



Analog to Digital Conversion

Preview from Notesale.co.uk
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DAC process

