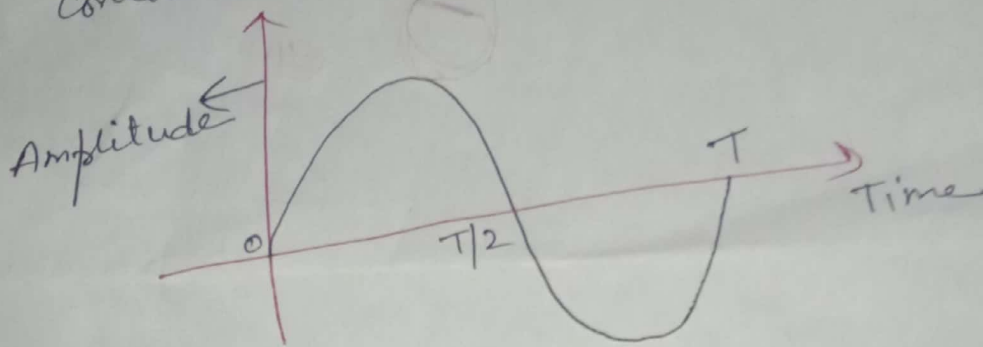


Digital Electronics (lec-1)

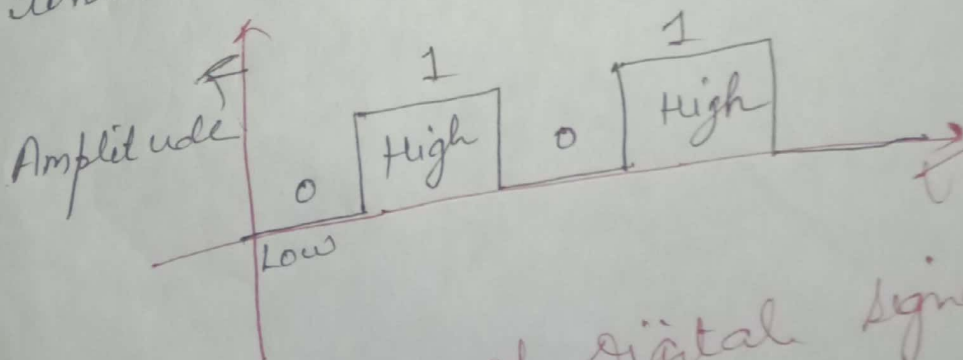
There are two types of signals in Electronics :-

- 1) Analog signal.
- 2) Digital signal

These signals are continuous in nature.



Digital signal :- These signals have discrete value at discrete level of time.

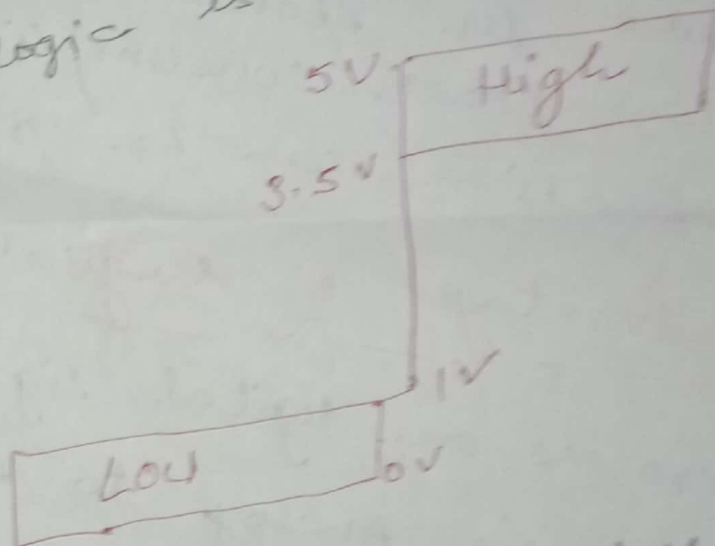


Representation of Digital signals :-
The digital signals have two discrete values :-

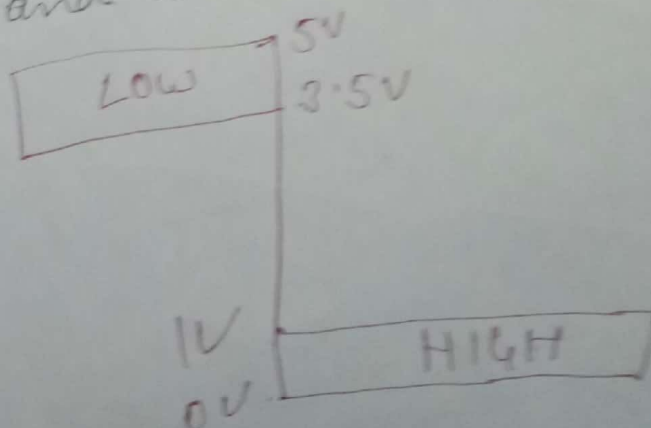
→ low and high
According to the choice of LOW and HIGH logic, there are two types of logic system.

→ Positive logic system
→ Negative logic system

1) PLS : — If the lower of the two levels, has been designated as LOW level and the higher as HIGH level, then the logic is called positive.



2) NLS : — If the higher of the two levels, has been designated as LOW level and the lower as HIGH level,



Advantages of Digital Techniques

- 1) Digital IC's are very cheap and compact
- 2) Digital devices work only in ranges (High and Low). Thus their operation is very simple and reliable.
- 3) Digital circuit can be fabricated on IC chips, hence they require less space.
- 4) low power consumption.
- 5) Operation can be programmed.

Disadvantages of Digital Circuits:-

- 1) Process on digital signal.
- 2) Require Analog to digital converter (A/D C). at I/P.
- 3) Require digital to Analog signal at O/P.

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