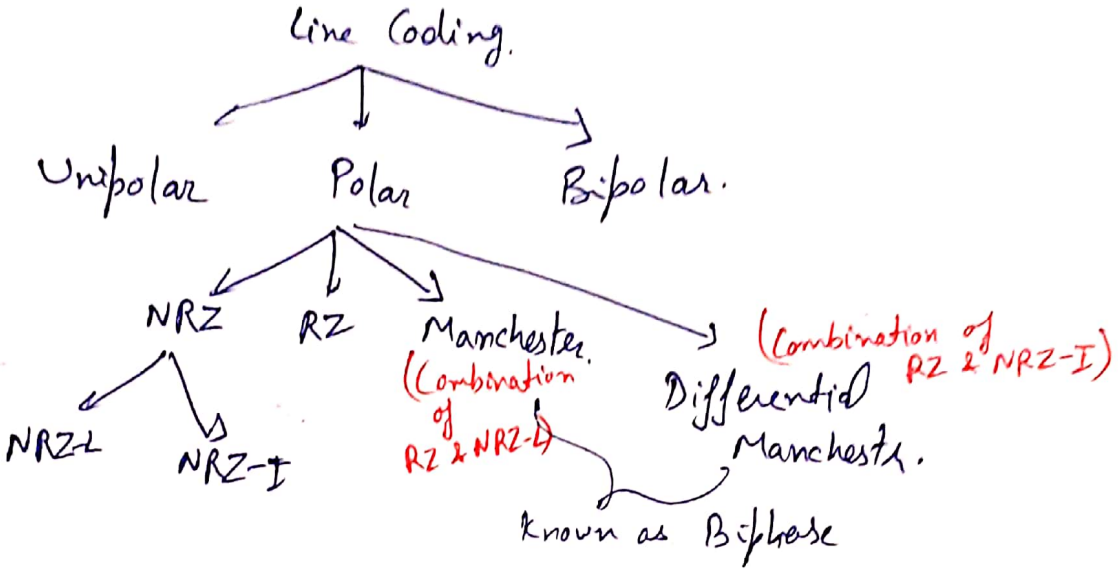
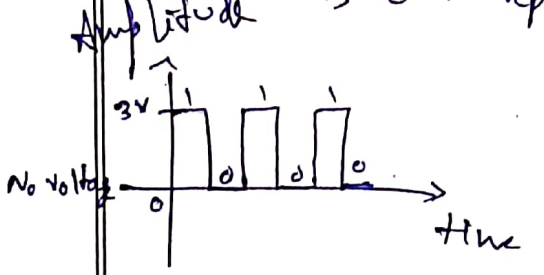
(Line Coding)

Digital to Digital Conversion

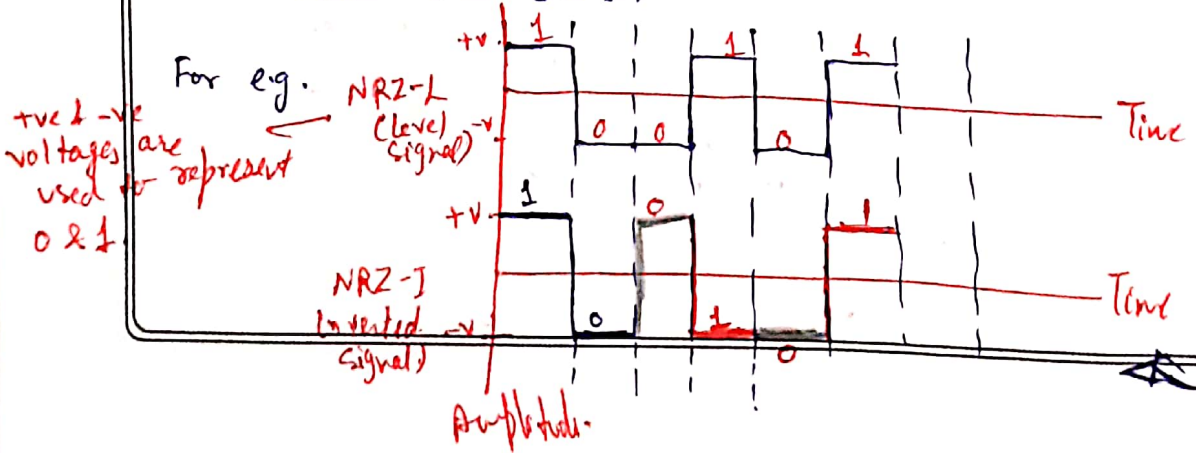


Unipolar → Singal level to represent the data.
→ 1 → with high voltage.
→ 0 : represented with no voltage.



Polar → Multiple voltage levels are used to represent the bits 0 & 1.

(i) Polar NRZ (Non Return to Zero)
Uses two different voltage levels to represent the binary values i.e. 0 & 1.

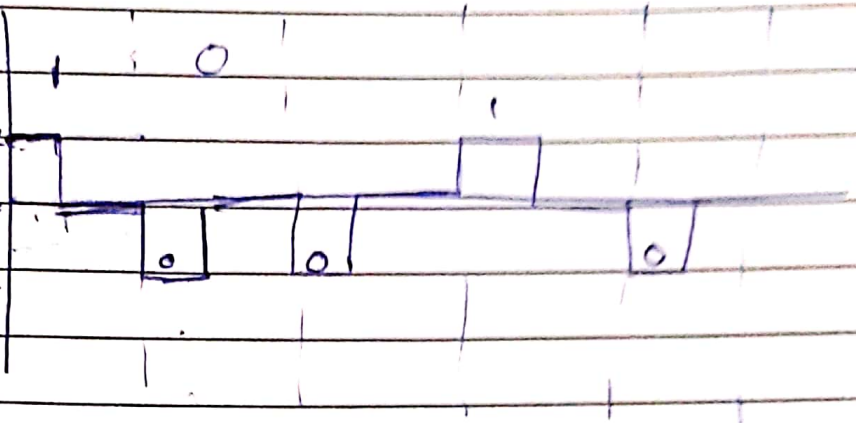


Lets say Data bits are 100101
So, Digital signals will be in Polar line coding with NRZ-L & NRZ-I

Expt. No..... eg 10010 Page No..... Date.....

(iii) RZ - Encoding
(Return to Zero)

In this each signal drops to zero between each pulse. Zero between each bit is a neutral or rest condition.



Mod frequency shift keying

Bipolar → 3 voltages +ve, -ve & 0 voltage.
+ve, -ve to Represent 1
0 voltage to represent 0.

Lets say, Data bits are → 10011010
Data Digital Signal by using Bipolar Line Coding will be -