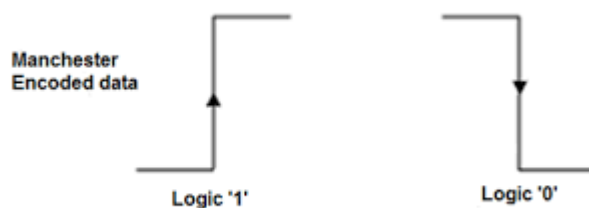


Line Encoding Schemes

There are several polar lines encoding schemes like:

1. **NRZ-L:** In NRZ-L the level of voltage determines the value of the bit.
Rules:
 - 0 bit is represented by +V
 - 1 bit is represented by -V
2. **NRZ-I:** In NRZ-I the inversion or lack of inversion determines the value of the bit.
Rules:
 - 0 bit means no change in the level of voltage
 - 1 bit means change the level of voltage.
3. **Manchester:** It is the combination of RZ and NRZ-L. The duration of bit is divided into 2 halves it remains at one level in first half and other level in second half.

Rules:



4. **Differential Manchester:** It is the combination of RZ and NRZ-I. The transition is in the middle of the bit but this time value of the bit decides which transition.
Rules:
 - 0 bit means transition.
 - 1 bit means no transition.