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LRC

- ★ Longitudinal Redundancy Check.
- ★ In LRC, a block of bits is organized in rows and columns.
- ★ a.k.a Two Dimensional parity.
- ★ The parity bit is calculated for each column and sent along with the data.
- ★ The block of parity acts as the redundant bits.

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LRC – EXAMPLE

Find the LRC for the data blocks 11100111 11011101 00111001 10101001 and determine the data that is transmitted?

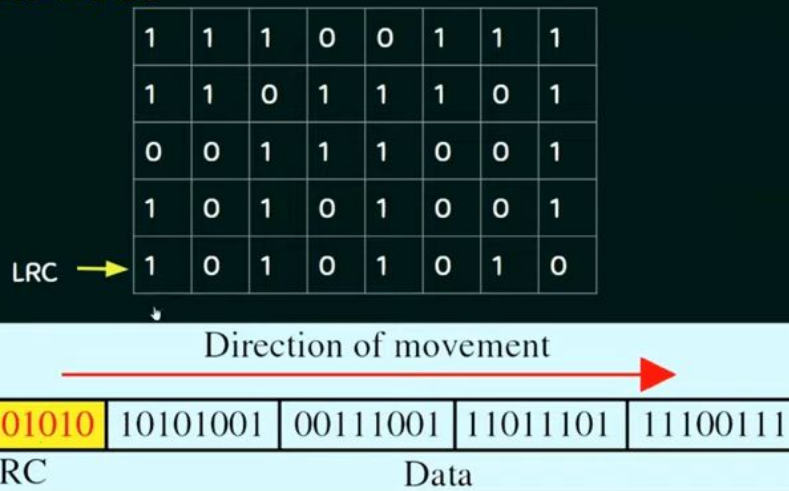
Odd no. of 1's	1
Even no. of 1's	0

1	1	1	0	0	1	1	1
1	1	0	1	1	1	0	1
0	0	1	1	1	0	0	1
1	0	1	0	1	0	0	1
LRC → 1	0	1	0	1	0	1	0

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LRC – EXAMPLE

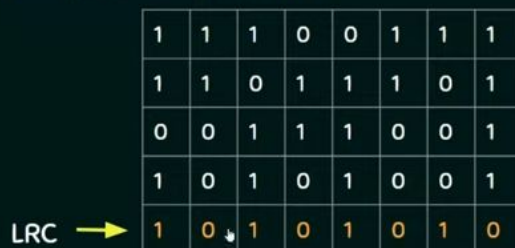


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PERFORMANCE OF LRC

- ★ LCR increases the likelihood of detecting burst errors.
- ★ If two bits in one data units are damaged and two bits in exactly the same positions in another data unit are also damaged, the LRC checker will not detect an error.



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