



# **SNS COLLEGE OF TECHNOLOGY**

**Coimbatore-36.**

**An Autonomous Institution**

**Accredited by NBA – AICTE and Accredited by NAAC – UGC with ‘A++’ Grade  
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai**

**COURSE NAME : 19CSB301 COMPUTER NETWORKS**

**III YEAR/ V SEMESTER**

**UNIT – I FUNDAMENTALS AND PHYSICAL LAYER**

**Topic: Data Representation and Data flow**

**Dr.V.Savitha**

**Associate Professor**

**Department of Computer Science and Engineering**



# Data Representation

- Different forms such as text, numbers, images, audio, and video

- Text → a bit pattern, a sequence of bits (Os or Is).

- Numbers → represented by bit patterns

- Images → Pixels, resolution, RGB color images, YCM

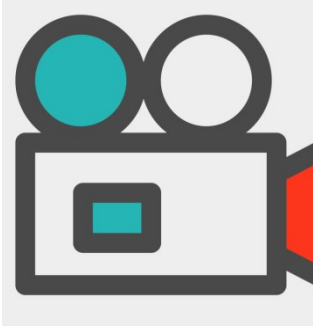
- Audio → recording or broadcasting of sound or music

- Video → picture or movie



0 1 2 3 4  
5 6 7 8 9

.jpg





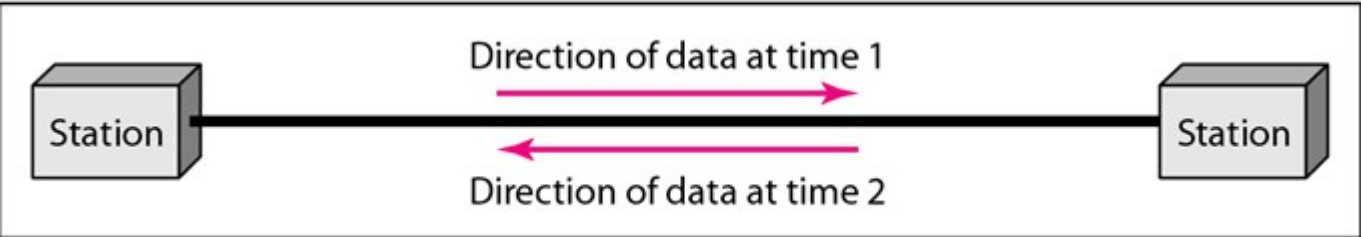
# *Data Flow*

*Communication between two devices can be simplex, half-duplex, or full-duplex*

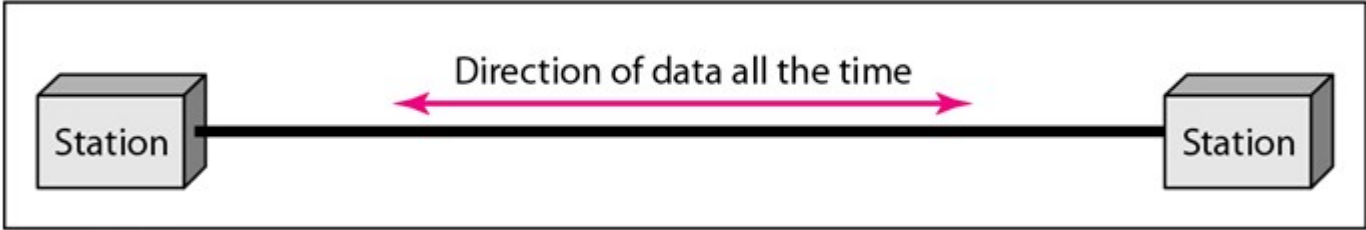
Simplex



Half-duplex



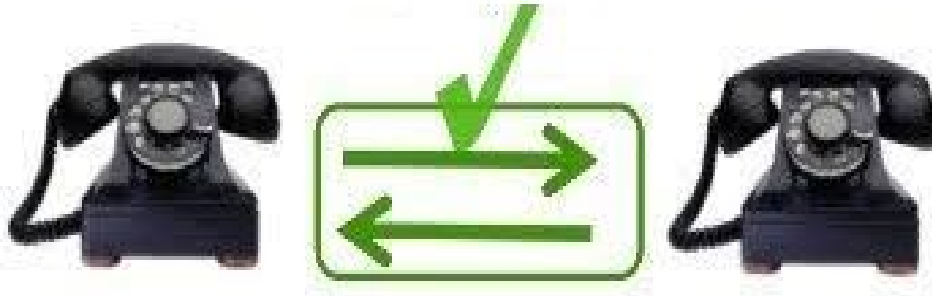
Full-duplex





# Discussion

*Identify and categorize the type of data flow from the below devices .*





# References

- Behrouz A. Forouzan, “Data communication and Networking”, Fourth Edition, Tata McGraw – Hill, 2011.
- <http://www.cs.iit.edu/~cs660/cs666/666week1.pdf>

