

Data Representation

How do computers represent data?

What is the popular coding systems to represent data ?

Bit

**Recognize only two discrete states:
on or off**

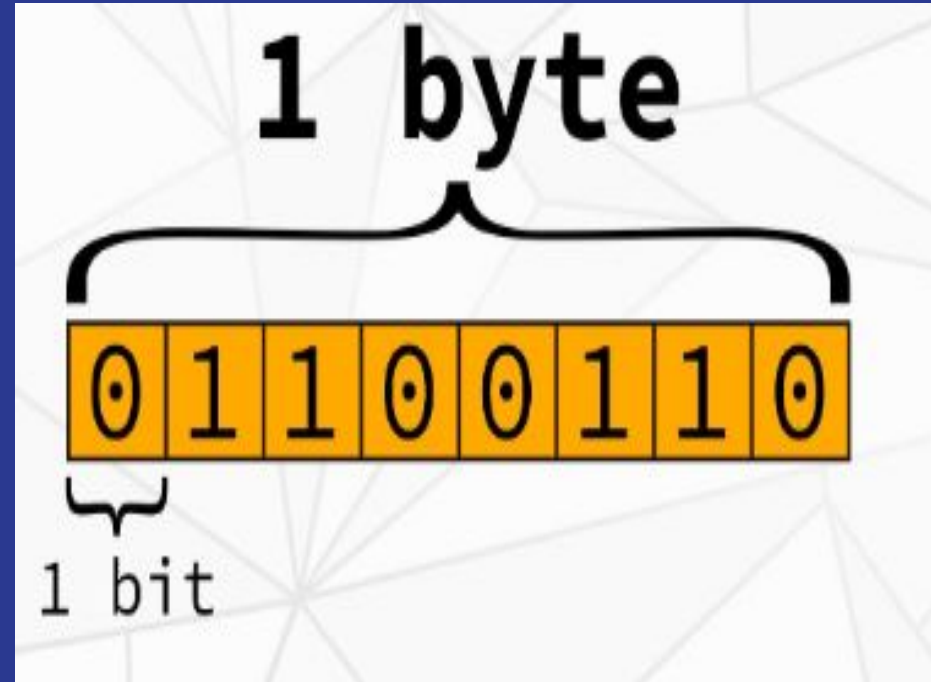
**Smallest unit of data computer can
process**



Byte

Eight bits grouped together

**combinations of 0s and 1s to
represent 256 individual characters**



popular coding systems to represent data

ASCII- American Standard Code for Information Interchange

Unicode- coding scheme capable of representing all world's languages

ASCII	UNICODE
A character encoding standard for electronic communication	A computing industry standard for consistent encoding, representation, and handling of text expressed in most of the world's writing systems
Stands for American Standard Code for Information Interchange	Stands for Universal Character Set
Supports 128 characters	Supports a wide range of characters
Uses 7 bits to represent a character	Uses 8bit, 16bit or 32bit depending on the encoding type
Requires less space	Requires more space
	Visit www.PEDIAA.com

References.

<https://medium.com/@vanvlymenpaws/ascii-vs-unicode-4174def5c09d>

<https://www.wordorigins.org/big-list-entries/bit-byte>

