

Character Encoding

☰ Chapter No.	21
▼ Status	Completed

▼ A **byte** is the number of bits used to encode a single character of text in a computer

- A byte is usually comprised of **eight bits**

- A **character set** is the complete set of characters that a particular computer uses

▼ The **American Standard Code for Information Interchange (ASCII)** is a character encoding standard for electronic communication.

- ASCII codes **represent text** in computers, telecommunications equipment, and other devices

▼ **Unicode** is an information technology standard for the consistent encoding, representation, and handling of text expressed in most of the world's writing systems

- The ultimate aim of Unicode is to be able to **present any possible text in any written language in code form**
- This has been extended to include a number of other **symbols used in technical situations**, as well as **emoji**
- Unicode is designed so that **once a code has been determined**, it **never changes**
- A character code is referred to as a **code point**

▼ ASCII & Unicode in Python

▼ `chr()`

- Returns the character that represents the specified ASCII code or Unicode code point

▼ ord()

- Returns the number that represents the ASCII code or Unicode code point of the specified character
- In Python, Unicode code points are represented using the escape sequence "\u", followed by the hexadecimal numbers of the code point