The oldest character encoding system is ASCII, represents the English alphabet, digits and punctuations marks.

**🔹 ASCII**

* **Original ASCII** = **7-bit encoding** → 128 values (0–127).
* Covers English letters, digits, punctuation, and control characters (newline, tab, etc.).

**🔹 Extended ASCII (a.k.a. code pages)**

* Later, people used the extra 8th bit → **8-bit encoding** = 256 values (0–255).
* That gave room for accented characters (é, ñ), box-drawing characters, and symbols.
* But different systems defined those extra 128 characters differently → **no universal standard**.

**🔹 Unicode (modern standard)**

* To fix that mess, we now use **Unicode** (UTF-8, UTF-16, etc.), which can represent **over 1 million characters** across all languages and symbols.

✅ So to answer directly:

* **ASCII itself** = 128 encodings (7-bit).
* **Extended ASCII** = 256 encodings (8-bit).
* **Unicode (UTF-8)** = today’s standard, backward-compatible with ASCII but way larger.

## Networking

Servers store the websites we use.