**ASCII:**

- American Standard Code for Information Interchange (ASCII) – Most common mapping for keyboard to code by assigning a number to each character (#72 = H, #101 = e) 0-256  
- *ord()* function tells us the numeric value of an ASCII character  
- One character = one byte (memory inefficient)

**Unicode:**

- New way of organizing hundreds of millions of characters so they are machine readable (different languages, new symbols, etc)  
- *UTF-8* is the recommended method for encoding data to be exchanged between systems (1-4 bytes)  
- In Python3 all strings are Unicode  
- When we talk to an external resource like a network socket we send bytes and we need to *encode* them before sending. When we read data from an external resource, we need to *decode* it   
  
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Assumes the data is ASCII or UTF-8 by default, don’t need to tell it