# OS 2/18

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# **ASCII**

- ASCII is a mapping between bytes, characters, glyphs
- Unicode helps us because...something about having too many things for ASCII?
- Unicode = [bytes/codepoints]  $\rightarrow$  glyphs
- $\bullet~$  We're using UTF-8 in this class, it transforms code points to bytes
  - We're paying attention to the first bit in an 8-bit string
    - \* If the first bit is 0, the whole thing is an ASCII character
    - \* If the first bit is 1, we need to look at a few other things
      - · If the first bit is 1 and the next is 0, something about not needing any more space...?
      - · If the first bit is 1 and the next is 1, you have a two byte character where the first bit of the second byte is also 1
      - The process continues for needing more bytes, i.e. if you need 3 bytes your first 3 bits of the first byte will be 1, then you'll have two more bytes where the first bit is 1

# C Stuff

- syscall is a wrapper
- syscalls is a list of different system calls, I think
- size <filename> returns the text, data, bss, dec, hex sizes for the file
- strace <filename> let's you see "what's going on under the hood" according to Grant
- exit is a wrapper that does some cleanup before calling \_exit
- \_exit is a syscall

### **Forks**

- You have a zombie process and an orphan process
- An orphan process happens when the parent dies
  - The orphan is adopted by pid = 1 init/systemd