1/25/23

printf prints the float as a decimal, not float

arm - unsigned char
x86 - signed char

In C, arrays must be of same type
- 1 dimension vector
- 2 matrixs
higher tensor

Chas 1 dimensional memory, have to linearize matrix,
- Array address arithmetic

malloc describes a block of bytes, but there are values before the pointer

declare array:
type name = { ... }

C stores floats as a bit pattern, to make sure there is no confusion about the representation
clicking switches for individual registers

C stores matrix in row major order

m[3][3]
↑ ↑
row column

Matrix multiplication
$\sim n^3$
critical in machine learning

merge sort
for linked lists, fast

It's the algorithm that matters
- Blum speed up theory

arrays are pass by reference
- pass pointer to array

& "address of" operator

Size of operator
- don't rely on it to give us size of array

dereferencing a pointer = following pointer to actual address & value

Alias -
different pointer pointing to a value w/ y

arrays can expand in C

Binary search is the fastest
requires array to be sorted