Why Dynamic Memory Allocation:

int arr[5] = {1,2}; // 1,2,0,0,0

default

4+4+4 = 12 bytes wasted

allocate

So, we provide runtime memory to save memory space & increase program efficiency. (Dynamic Memory Allocation)

#include <stdlib.h> ✓

① malloc → Memory Allocation

malloc (size);

② calloc → Continuous / Contiguous Memory Allocation

calloc (no of elements, size);

③ realloc → Reallocation

realloc (ptr, new size);

④ free → Free the Memory

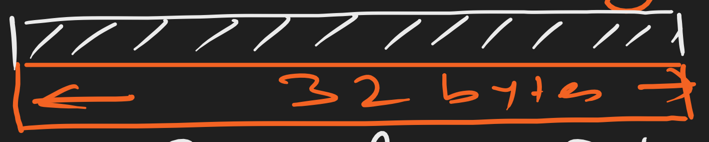
free (ptr);

* Malloc, Calloc, Realloc

No data type check

malloc (size) →

[32 bytes]



(garbage) junk values

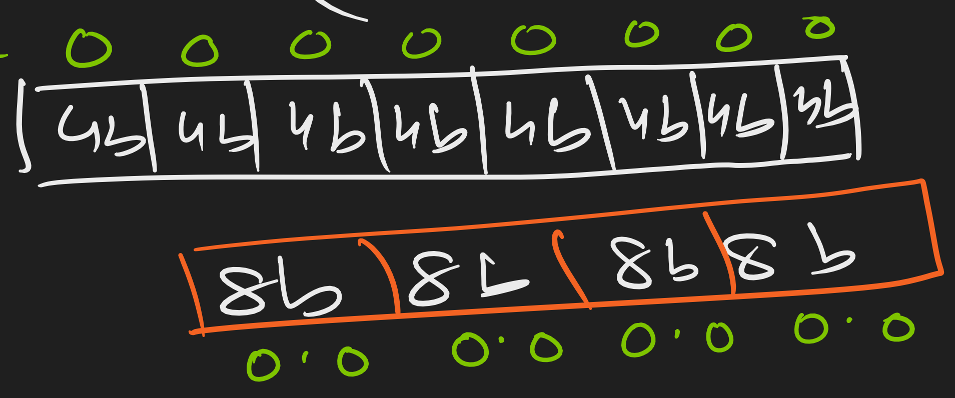
return void ptr

so (type cast)

calloc (n, size) →

(32 bytes)

default ←



= int — 4

= float — 4

= char — 1

= double — 8