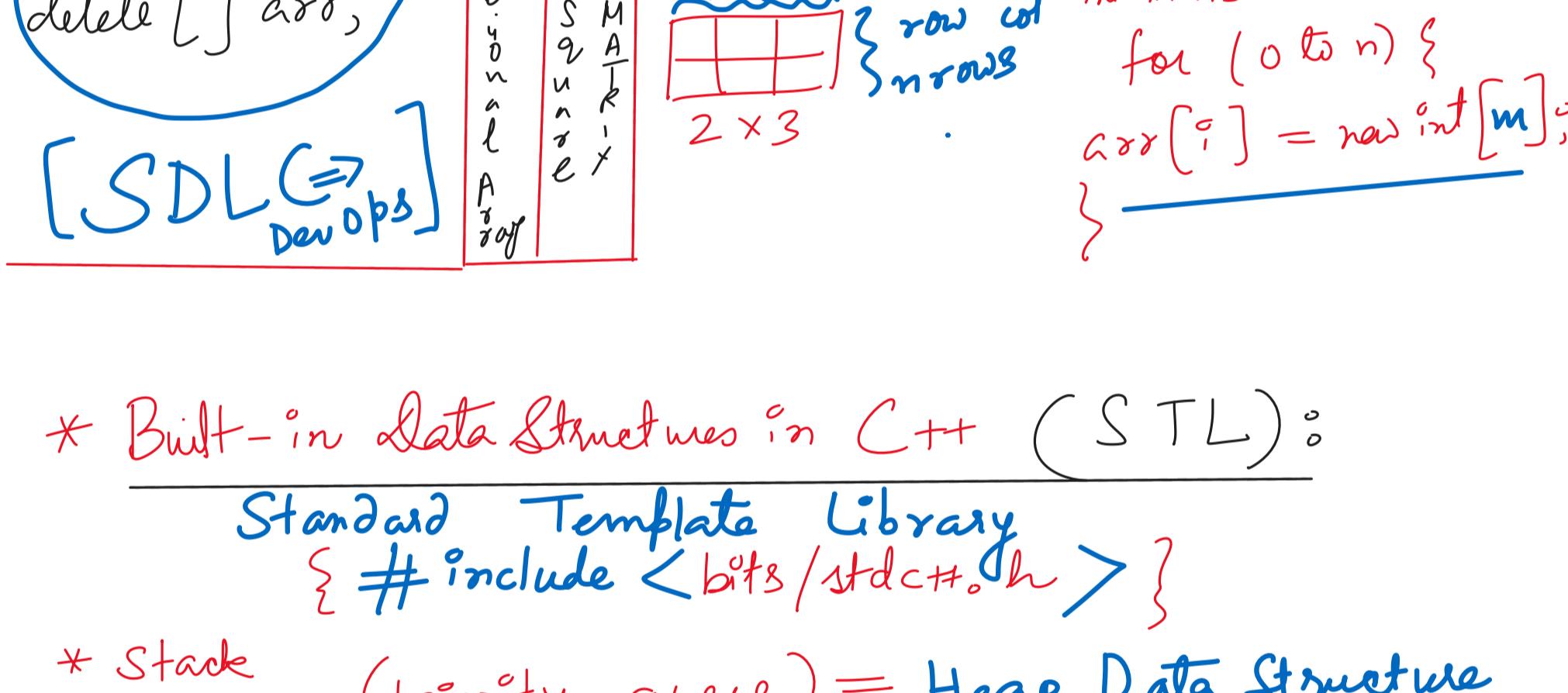


### Dynamic Memory Allocation in C++

**Note:**  
`malloc`, `calloc`,  
`realloc` & `free`  
are also available  
in C++.  
To use we write:  
`#include <cstdlib>`

In the newer versions from C++17 or 18,  
we use `new` & `delete`.

`new` → memory allocation  
`delete` → memory deallocation  
(**Pointers**)



### \* Built-in Data Structures in C++ (STL):

**Standard Template Library**  
`{ #include <bits/stdc++.h> }`

- \* Stack
- \* queue → (priority-queue) = Heap Data Structure
- \* list → doubly linked list (Both ways traversal)
- \* forward\_list → singly linked list (forward traversal)
- \* map → ordered\_map (map) → alphabetical order  
 $\langle k, v \rangle$  unordered\_map (HashMap in Java)
- \* set → ordered-set (set) → alphabetical order  
(unique)
- \* vector → dynamic arrays

