STL (Standard template library).

↳ to include all libraries in one ⇒ use #include<bits/stdc++.h>

⇒ Stl divides into four Parts:
- → Algorithms
- → Containers (vectors, ques, set, maps)
- → Functions
- → Iterators

Pairs:- they are Part of utility library that allows you to store two heterogenous object.

* Sorting two values together.

vectors:
- → dynamic in nature
- → we can increase size
- → if we do not know the size, so we can think of vectors.

vector < int > v ; ⇒ creates empty container.

Push_back ⇒ use for Storing

emplace_back ⇒ Also use for it but this is faster than Push-back.

list:

list is similar to vector but it gives us front operation, as operations in list are much faster than vector like Push front is >> insert function.

★ internal operations in lists are doubly linked list.

★ For vectors, singly linked list is maintained.

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<u>Stack:</u>

- ★ Stack is something LIFO ⇒ last in first out
- ★ It means that if we insert last element in stack then we call top(); function so, it will Print that last element.

<u>Set:</u>

Set container stores everything {sorted order / unique ⇒ means not store duplicate elements.
↳ linear

Time complexity O(log(n))

<u>Multi_set:</u>

- ★ it is same as set.
- ★ But it also store duplicate elements along with sorted order.

<u>unordered set:</u>

- ★ It does not store elements in sorted order.
- ★ stores in any order.
- ★ Also not store duplicate elements.
- ★ all operations are similar to set but
- ★ lower and upper bound function does not work.
- ★ Time complexity O(1), worst case O(n)

<u>Map:</u>

but this will not be same. ⇒ It may be same

↳ Map is something <u>key</u> and <u>value</u> related concept.
↳ map stores unique key in sorted order.