

C++ built-in Lib.. function

① Pair

int a, b, c ;

$(x_1, y_1) \rightarrow P_1$

$(x_2, y_2) \rightarrow P_2$

$(x_3, y_3) \rightarrow P_3$

pair < pair < pair < int, int >, int > x

first *second*
first *second*

x.first.second

② Vector

Array \rightarrow

int Arr[105];

A[0], A[1] ... \rightarrow \nwarrow \nwarrow \nwarrow \nwarrow \nwarrow

0	1	2	3	4	5	6	7	8	9	
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\uparrow

*v.begin()

\uparrow

*v.end()

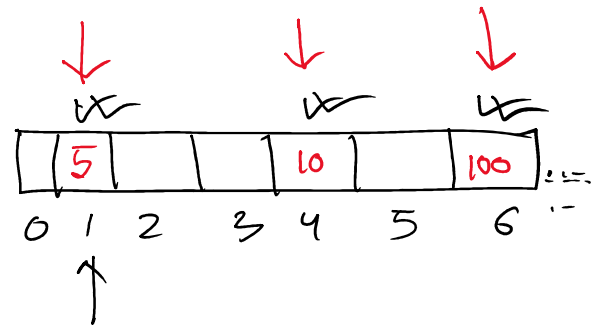
③ Map

int arr[100];

arr[1] = 5;

arr[4] = 10;

arr[6] = 100;



mp[1] = 5
 ↑ ↑
 Key value

④ unordered_map

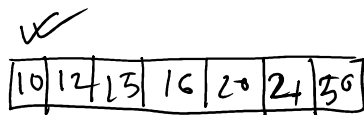
ump[100] = 2

ump["abc"] = 10
 ↑

$T_{Map} > T_{unmap}$

primitive → int, char, bool, double,

⑤ Set



$s.insert(10)$
 $s.insert(12)$
 $s.insert(10)$

} $O(\text{current size of set})$
 10, 12

⑥ unordered_set

$O(1)$

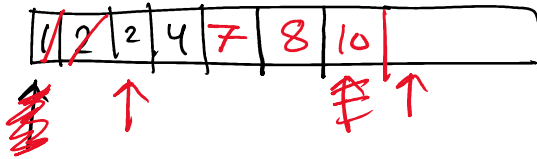
⑦ Multiset

{10, 10, 12}

⑧ Queue

1, 5, 9, 7, 10, 5, 8, 10, -1

✓ ✓ ✓ ✓ ✓
↑



⑨ Stack

