

C++ STL Cheatsheet

STL Component	Purpose	Syntax	Example
unordered_set	Insert element	s.insert(x);	unordered_set<int> s; s.insert(5);
unordered_set	Check existence	s.count(x)	if (s.count(5)) {...}
unordered_set	Erase element	s.erase(x);	s.erase(5);
vector	Add element	v.push_back(x);	vector<int> v; v.push_back(1);
vector	Sort	sort(v.begin(), v.end());	sort(v.begin(), v.end());
vector	Size	v.size();	int n = v.size();
set	Insert	s.insert(x);	set<int> s; s.insert(2);
set	Find	s.find(x);	if (s.find(2) != s.end()) {...}
unordered_multiset	Insert duplicates	s.insert(x);	unordered_multiset<int> s; s.insert(3);
multiset	Insert duplicates	s.insert(x);	multiset<int> s; s.insert(4);
unordered_map	Insert/Assign	m[x] = y;	unordered_map<int, int> m; m[1] = 10;
map	Traverse	for(auto x : m)	for (auto p : m) cout << p.first << p.second;
queue	Access front	q.front();	int f = q.front();
stack	Top	s.top();	int t = s.top();
priority_queue	Top element	pq.top();	int maxVal = pq.top();
__builtin_popcount	Count set bits	__builtin_popcount(x);	int c = __builtin_popcount(7);
next_permutation	Next permutation	next_permutation(v.begin(), v.end());	next_permutation(v.begin(), v.end());
min_element	Find minimum	min_element(v.begin(), v.end());	auto it = min_element(v.begin(), v.end());
max_element	Find maximum	max_element(v.begin(), v.end());	auto it = max_element(v.begin(), v.end());