**Map Built-in Functions:**

1. **Constructor**

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| **Name** | **Details** | **Time C** |
| Insert() | map<int, int> mp = {{1, 10}, {2, 20}, {4, 40}};  mp.insert({100, 1});  mp[500] = 5; |  |
| erase() | mp.erase(500); |  |
| find() | auto it = mp.find(2);  if(it!= mp.end()) cout<< "Found"<< endl;  else cout<< "Not Found"<< endl; |  |
| begin(),end() | map<int, int> mp = {{1, 10}, {2, 20}, {4, 40}};  vector<pair<int, int>> v(mp.begin(), mp.end());  for(auto c:v) cout << c.first << " "; |  |
| size() | mp.size(); |  |
| empty() | (mp.empty()) ? cout << "Yes" : cout << "NO"; |  |
| Lower\_bound()  [ element with key greater than or equal ] | map<int, int> mp = {{1, 10}, {2, 20}, {4, 40}};  auto it = mp.lower\_bound(1);  if (it != mp.end())  cout << "Key: " << it->first << ", Value: " << it->second <<endl;  else  cout <<"No element with key greater than or equal to 3 found."<< endl; | Output:  Key: 1, Value: 10 |
| Upper\_bound()  [ element with key greater ]] | auto it = mp.upper\_bound(1);  if (it != mp.end())  cout << "Key: " << it->first << ", Value: " << it->second <<endl;  else  cout << "No element with key greater 1 found." << endl; | Output:  Key: 2, Value: 20 |
| Equal\_range() | map<int,string> mp={{1,"one"}, {2,"two"}, {3, "three"}, {4, "four"}};  auto range = mp.equal\_range(3);// Find the range of elements with key 3  cout << "Elements with key 3:" << endl;  for (auto it = range.first; it != range.second; ++it)     cout << it->first << ": " << it->second << endl; |  |