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**Code:-**

#include<iostream>

#include<iterator>

#include<map>

#include<ctype.h>

#include<algorithm>

using namespace std;

int main()

{

typedef map<string, float> mapType;

mapType populationMap;

populationMap.insert(pair<string, float>("MAHARASHTRA", 125));

populationMap.insert(pair<string, float>("UTTAR PRADESH", 225));

populationMap.insert(mapType::value\_type("BIHAR", 120));

populationMap.insert(mapType::value\_type("WEST BENGAL", 100));

populationMap.insert(make\_pair("MADHYA PRADESH", 90));

populationMap.insert(make\_pair("TAMIL NADU", 80));

populationMap.insert(make\_pair("RAJASTHAN", 78));

populationMap.insert(make\_pair("ANDHRA PRADESH", 53));

populationMap.insert(make\_pair("ODISHA", 47));

populationMap.insert(make\_pair("KERALA", 38));

populationMap.insert(make\_pair("TELANGANA", 37));

populationMap.insert(make\_pair("ASSAM", 35));

populationMap.insert(make\_pair("JHARKHAND", 38));

populationMap.insert(make\_pair("KARNATAKA", 68));

populationMap.insert(make\_pair("GUJARAT", 70));

populationMap.insert(make\_pair("PUNJAB", 31));

populationMap.insert(make\_pair("CHHATTISGARH", 30));

populationMap.insert(make\_pair("HARYANA", 29));

populationMap.insert(make\_pair("UT DELHI", 19));

populationMap.insert(make\_pair("UT JAMMU AND KASHMIR", 14));

populationMap.insert(make\_pair("UTTARAKHAND", 12));

populationMap.insert(make\_pair("HIMACHAL PRADESH", 8));

populationMap.insert(make\_pair("TRIPURA", 04));

populationMap.insert(make\_pair("MEGHALAYA", 4));

populationMap.insert(make\_pair("MANIPUR", 3));

populationMap.insert(make\_pair("NAGALAND", 2));

populationMap.insert(make\_pair("GOA", 2));

populationMap.insert(make\_pair("ARUNACHAL PRADESH", 2));

populationMap.insert(make\_pair("UT PUDUCHERRY", 2));

populationMap.insert(make\_pair("MIZORAM", 1));

populationMap.insert(make\_pair("UT CHANDIGARH", 1));

populationMap.insert(make\_pair("SIKKIM", 1));

populationMap.insert(make\_pair("UT DADRA AND NAGAR HAVELI AND DAMAN AND DIU", 1));

populationMap.insert(make\_pair("UT ANDAMAN AND NICOBAR ISLANDS", 1));

populationMap.insert(make\_pair("UT LAKSHADWEEP", 0.0003));

populationMap.insert(make\_pair("UT LADAKH", 0.00006));

// Erase the end element using the erase function

// Because it's ordered map (by key),

// map elements are not in the order of the entry

// In this map it's India since it's not ordered alphabetically.

char ch = 'n';

do{

mapType::iterator iter = --populationMap.end(); //populationMap.erase(iter);

// output the size of the map

cout<<"Total state and UT of India with Size of populationMap: "<<populationMap.size()<<'\n';

// find will return an iterator to the matching element if it is found

// or to the end of the map if the key is not found

string state;

cout<<"\nEnter that state you known the population or \nEnter 'all' for all information:-> ";

cin>>state;

transform(state.begin(), state.end(), state.begin(), ::toupper);

if(state == "ALL")

{

for (iter = populationMap.begin(); iter != populationMap.end(); ++iter)

{

cout<<iter->first<<": "<<iter->second<<" million\n";

}

}

else{

iter = populationMap.find(state);

if(iter != populationMap.end())

cout<<state<<"'s populations is "<<iter->second<< " million\n";

else

cout<<"Key is not in populationMap"<<'\n';

}

cout<<"\nDo you want to search more...(y/n)";

cin>>ch;

}while(toupper(ch) == 'Y');

populationMap.clear();

} // clear the entries in the map

**Output:-**

Total state and UT of India with Size of populationMap: 36

Enter that state you known the population or

Enter 'all' for all information:-> all

ANDHRA PRADESH: 53 million

ARUNACHAL PRADESH: 2 million

ASSAM: 35 million

BIHAR: 120 million

CHHATTISGARH: 30 million

GOA: 2 million

GUJARAT: 70 million

HARYANA: 29 million

HIMACHAL PRADESH: 8 million

JHARKHAND: 38 million

KARNATAKA: 68 million

KERALA: 38 million

MADHYA PRADESH: 90 million

MAHARASHTRA: 125 million

MANIPUR: 3 million

MEGHALAYA: 4 million

MIZORAM: 1 million

NAGALAND: 2 million

ODISHA: 47 million

PUNJAB: 31 million

RAJASTHAN: 78 million

SIKKIM: 1 million

TAMIL NADU: 80 million

TELANGANA: 37 million

TRIPURA: 4 million

UT ANDAMAN AND NICOBAR ISLANDS: 1 million

UT CHANDIGARH: 1 million

UT DADRA AND NAGAR HAVELI AND DAMAN AND DIU: 1 million

UT DELHI: 19 million

UT JAMMU AND KASHMIR: 14 million

UT LADAKH: 6e-005 million

UT LAKSHADWEEP: 0.0003 million

UT PUDUCHERRY: 2 million

UTTAR PRADESH: 225 million

UTTARAKHAND: 12 million

WEST BENGAL: 100 million

Do you want to search more...(y/n)y

Total state and UT of India with Size of populationMap: 36

Enter that state you known the population or

Enter 'all' for all information:-> PUNJAB

PUNJAB's populations is 31 million

Do you want to search more...(y/n)Y

Total state and UT of India with Size of populationMap: 36

Enter that state you known the population or

Enter 'all' for all information:-> TRIPURA

TRIPURA's populations is 4 million

Do you want to search more...(y/n)n