OOP Lab Exp No.7

#include <iostream>

#include <map>

#include <string>

#include <utility>

using namespace std;

int main()

{

    typedef map<string,int> 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));

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

    populationMap.erase(iter);

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

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

    {

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

    }

    char c;

    do

    {

        string state;

        cout<<"\nEnter that state you want to know the population of: ";

        cin>>state;

        iter = populationMap.find(state);

        if( iter != populationMap.end() )

            cout << state <<"'s population is "

                << iter->second << " million\n";

        else

            cout << "State is not in Population Map" << '\n';

        cout<<"Do you wish to continue?(y/n):";

        cin>>c;

    }while(c=='y'||c=='Y');

    populationMap.clear();

    return 0;

}

OUTPUT :-

Total state and UT of India with Size of Population Map: 35  
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:0 million  
UT Lakshadweep:0 million  
UT Puducherry:2 million  
Uttar Pradesh:225 million  
Uttarakhand:12 million  
  
Enter that state you want to know the population of: Maharashtra  
Maharashtra's population is 125 million  
Do you wish to continue?(y/n):y  
  
Enter that state you want to know the population of: Karnataka  
Karnataka's population is 68 million  
Do you wish to continue?(y/n):y  
  
Enter that state you want to know the population of: Andhra Pradesh  
State is not in Population Map  
Do you wish to continue?(y/n):n