

***** Assignment No7 *****

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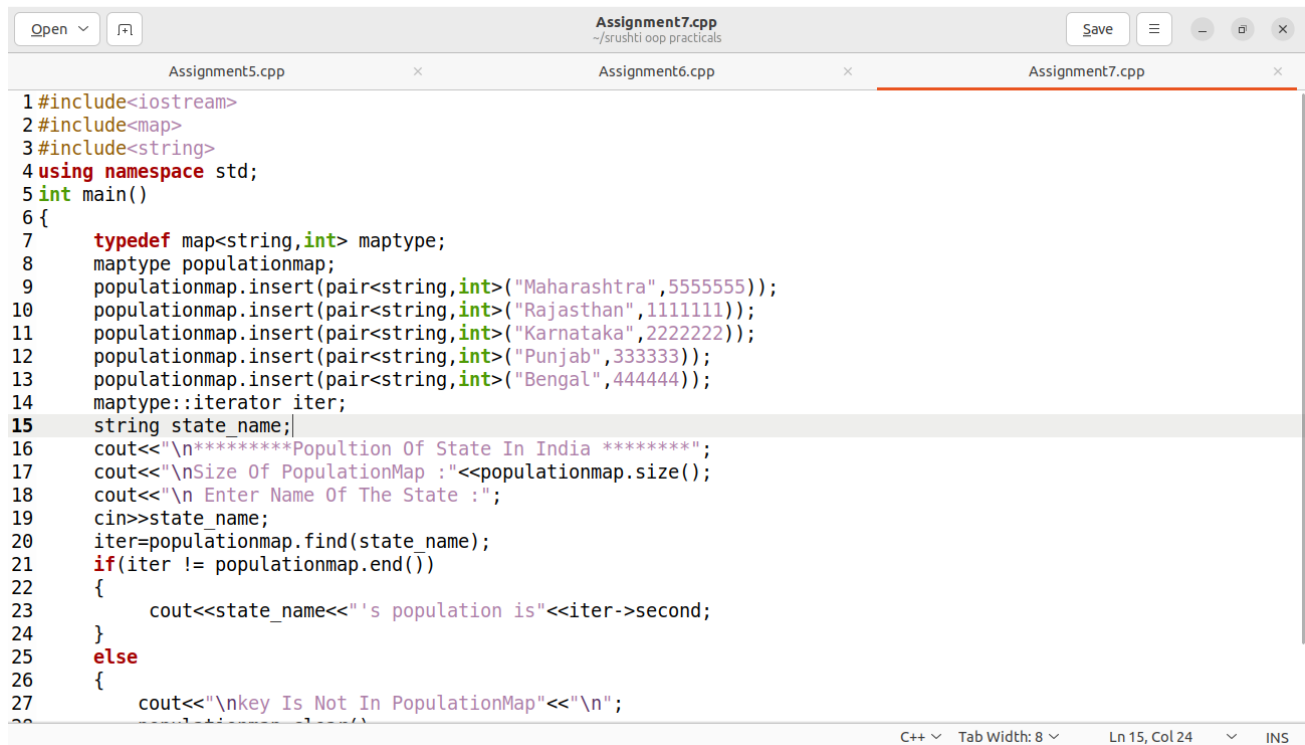
Class: SE -I Div:D

Roll No:205A081

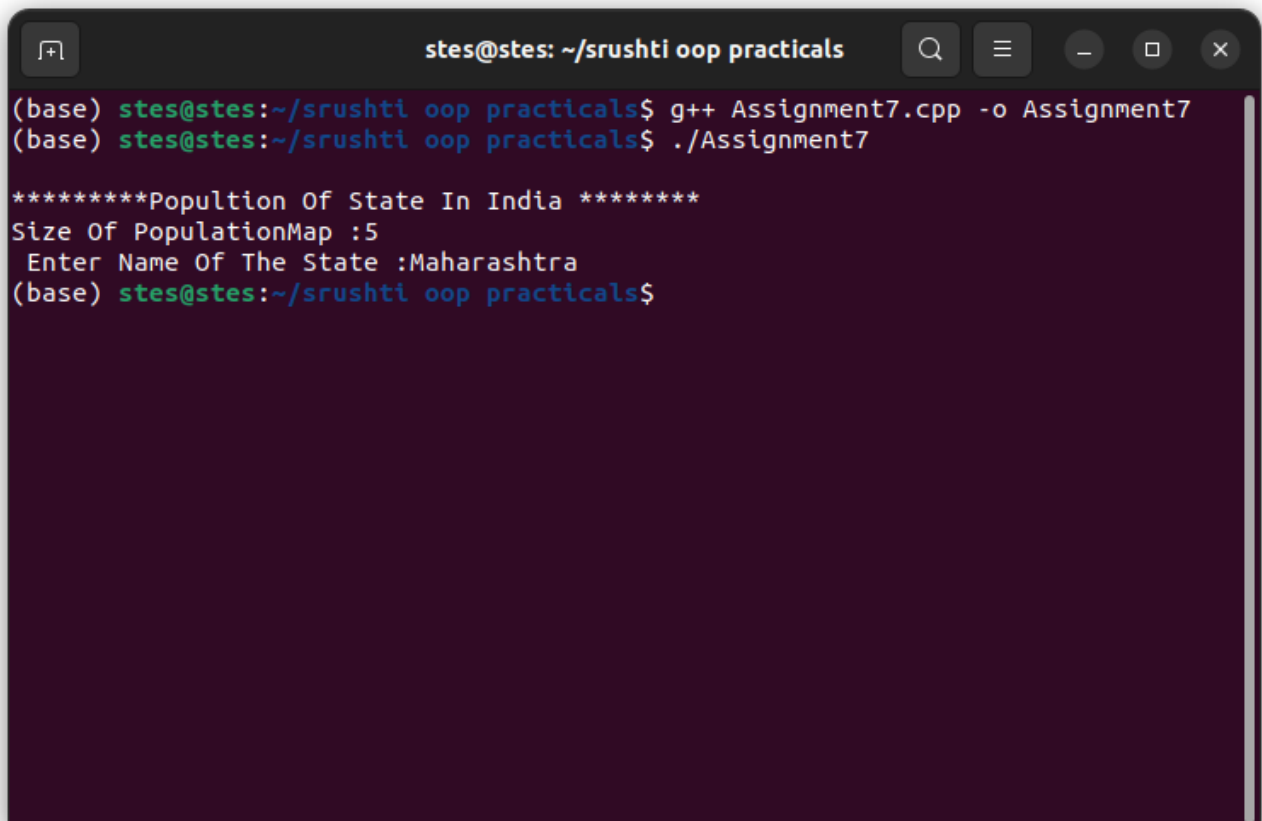
Write a program in C++ to use map associative container. The keys will be the names of states and the values will be the populations of the states. When the program runs, the user is prompted to type the name of a state. The program then looks in the map, using the state name as an index and returns the population of the state.

```
#include<iostream>
#include<map>
#include<string>
using namespace std;
int main()
{
    typedef map<string,int> maptype;
    maptype populationmap;
    populationmap.insert(pair<string,int>("Maharashtra",5555555));
    populationmap.insert(pair<string,int>("Rajasthan",1111111));
    populationmap.insert(pair<string,int>("Karnataka",2222222));
    populationmap.insert(pair<string,int>("Punjab",333333));
    populationmap.insert(pair<string,int>("Bengal",444444));
    maptype::iterator iter;
    string state_name;
    cout<<"\n*****Popultion Of State In India *****";
    cout<<"\nSize Of PopulationMap :"<<populationmap.size();
    cout<<"\n Enter Name Of The State :";
    cin>>state_name;
    iter=populationmap.find(state_name);
    if(iter != populationmap.end())
    {
        cout<<state_name<<"'s population is"<<iter->second;
    }
    else
    {
        cout<<"\nkey Is Not In PopulationMap"<<"\n";
        populationmap.clear();
    }
}
```

Output:



```
1#include<iostream>
2#include<map>
3#include<string>
4using namespace std;
5int main()
6{
7    typedef map<string,int> maptype;
8    maptype populationmap;
9    populationmap.insert(pair<string,int>("Maharashtra",555555));
10   populationmap.insert(pair<string,int>("Rajasthan",111111));
11   populationmap.insert(pair<string,int>("Karnataka",222222));
12   populationmap.insert(pair<string,int>("Punjab",333333));
13   populationmap.insert(pair<string,int>("Bengal",444444));
14   maptype::iterator iter;
15   string state_name;
16   cout<<"\n*****Popultion Of State In India *****";
17   cout<<"\nSize Of PopulationMap : "<<populationmap.size();
18   cout<<"\n Enter Name Of The State : ";
19   cin>>state_name;
20   iter=populationmap.find(state_name);
21   if(iter != populationmap.end())
22   {
23       cout<<state_name<<"'s population is"<<iter->second;
24   }
25   else
26   {
27       cout<<"\nkey Is Not In PopulationMap"<<"\n";
28   }
```



```
stes@stes: ~/srushti oop practicals
(base) stes@stes:~/srushti oop practicals$ g++ Assignment7.cpp -o Assignment7
(base) stes@stes:~/srushti oop practicals$ ./Assignment7

*****Popultion Of State In India *****
Size Of PopulationMap :5
Enter Name Of The State :Maharashtra
(base) stes@stes:~/srushti oop practicals$
```

