

/*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()
```

```
{
```

```
    map <string, int> populationMap;
```

```
    populationMap.insert(pair<string, int>("MH", 112));
```

```
    populationMap.insert(pair<string, int>("UP", 199));
```

```
    populationMap.insert(pair<string, int>("MP", 726));
```

```
    populationMap.insert(pair<string, int>("AP", 845));
```

```
    map<string,int>::iterator iter = populationMap.end();
```

```
    //output the size of the mapType
```

```
    cout<<"Size of populationMap:"<<populationMap.size()<<"\n";
```

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

```
    {
```

```
        cout<<iter->first<<": "<<iter->second<<"million\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 the state:";
```

```
    cin>>state;
```

```
    iter = populationMap.find(state);
```

```
    if(iter!=populationMap.end())
```

```
        cout<<state<<"population is:"<<iter->second<<"million\n";
```

```
    else
```

```
        cout<<"Key is not in populationMap";
```

```
    //clear the entries in the Map
```

```
    populationMap.clear();
```

```
    return 0;  
}
```