VIT - Vellore

Name: DIVYANSHU SINGH .
Email: divyanshu.singh2024a@vitstudent.ac.in
Roll no: 24BCT0101
Phone: 9999999999
Branch: PRIYADHARSINI M_OOPS
Department: admin
Batch: VL2024250502354
Degree: admin

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BCSE102P_Structured and Object Oriented Programming Lab_VL2024250502354

VIT V_Structured and OOP_Lab 5_COD_Easy_Static data Members functions

Attempt : 1
Total Mark : 20
Marks Obtained : 20

Section 1 : Coding

1. Problem Statement

Alex manages a retail store and wants to track total sales using an efficient method across multiple transactions. To achieve this, he implements a program that uses static data members and static member functions. These static elements ensure that the total sales are shared across all instances of the sales process.

You are required to write a program that helps Alex sum up the sales amounts over a given number of days, utilizing static members for maintaining the total sales. The program should calculate and display the total sales rounded to two decimal places.

Answer

```
#include<iostream>
#include<iomanip>
using namespace std;
class Shop{
    public:
    static
    void salary1(){
        int n;
        double k;
        double count=0;
        cin>>n;
        for(int i=0;i<n;i++){
            cin>>k;
            count+=k;
        }
        cout<<"Total Sales:"<<" "<<fixed<<setprecision(2)<<count;
    }
};
int main(){
    Shop f;
    f.salary1();
    return 0;
}
```

Status : Correct   *Marks : 10/10*

2. Problem Statement

Bobby is developing a simple program using a class named Demo to manage two static integer values, X and Y. Initially, these static members are set to 10 and 20, respectively. In the program, Bobby wants to allow users to update these static values dynamically by inputting new integers.

Your task is to help Bobby to create a class includes two static member functions: get(), which accepts new values for X and Y from the user, and fun(), which displays the current values of X and Y. The program should first show the initial values, allow the user to input new values, and then display the updated values.

Answer

```cpp
#include<iostream>
using namespace std;
class Demo{
    public:
    static int fun(int k,int u){
        cout<<"Value of X: 10"<<endl;
        cout<<"Value of Y: 20"<<endl;
        cout<<"Value of X: "<<k<<endl;
        cout<<"Value of Y: "<<u<<endl;
        return 0;
    }
    static int get(int n,int m){
        cin>>n>>m;
        fun(n,m);
        return 0;
    }
};
int main(){
    int n,m;
    cin>>n>>m;
    Demo i;
    i.fun(n,m);
    return 0;
}
```

Status : Correct   *Marks : 10/10*