

VIT - Vellore

Name: RONIT MEXSON .

Email: ronit.mexson2024@vitstudent.ac.in

Roll no: 24BAI0036

Phone: 9999999999

Branch: ARUMUGA ARUN R_OOPS

Department: admin

Batch: VL2024250502365

Degree: admin

Scan to verify results



BCSE102P_Structured and Object Oriented Programming Lab_VL2024250502365

VIT V_Structured and OOP_Lab 7_COD_Medium_Function Overloading

Attempt : 1

Total Mark : 10

Marks Obtained : 10

Section 1 : Coding

1. Problem Statement

You are creating a shopping cart for an e-commerce website. Implement overloaded functions called `calculateTotalPrice` that can calculate the total price of different types of items, such as a single item, multiple items, or items with discounts. Each overloaded function should take the required parameters and return the calculated total price.

Calculate the total price for a single item without quantity or discounts. Calculate the total price for multiple items in quantity without any discounts. Calculate the total price for multiple items with quantity and a discount percentage.

Answer

// You are using GCC

```

#include<iostream>
#include<iomanip>
using namespace std;

class cart{
public:
    void calculateTotalPrice(double a)
    {
        cout<<fixed<<setprecision(2)<<a<<endl;
    }
    void calculateTotalPrice(double a,double b){
        cout<<fixed<<setprecision(2)<<a*b<<endl;
    }
    void calculateTotalPrice(double a,double b, double c){
        cout<<fixed<<setprecision(2)<<(a*b*(100-c))/100.0<<endl;
    }
};

```

```

int main(){
    cart obj;
    while(1){
        int a;
        double b;
        int c;
        int d;
        cin>>a;
        if(a==1){
            cin>>b;
            obj.calculateTotalPrice(b);
        }
        else if(a==2){
            cin>>b>>c;
            obj.calculateTotalPrice(b,c);
        }
        else if(a==3){
            cin>>b>>c>>d;
            obj.calculateTotalPrice(b,c,d);
        }
        else if(a==4){
            break;
        }
        else{

```

```
        cout<<"Invalid choice";  
    }  
    }  
    return 0;  
}
```

Status : Correct

Marks : 10/10