X

W9_Programming_Qs-2

Due on 2023-03-30, 23:59 IST

Consider the following program (in C++11) that considers a number of purchases as input and find out the total expense. Fill in the blanks as per the instructions given below:

• Fill in the blank at `LINE-1` with appropriate header to overload `function` operator.
• Fill in the blank at `LINE-2` with an appropriate return statement to implement the overload `function` operator.
• Fill in the blank at `LINE-3` with the appropriate parameter list for calling the function `accumulate`,

The program must satisfy the sample input and output.

Your last recorded submission was on 2023-03-25, 21:08 IST

Select the Language for this assignment. C++

```
#include <iostream>
#include <list>
#include <numeric>

class purchase{
    public:
        purchase(int item_no, double price, int qty) : item_no_(item_no),
                price_(price), qty_(qty){}
        double get_price(){ return price_; }
        int get_qty(){ return qty_; }
    private:
        int item_no_;
        double price_;
        int qty_;
};


struct total_expense{
    double  operator() (double d, purchase& p){    //LINE-1
       return  d + p.get_price()*p.get_qty();     //LINE-2
    }
};

double get_total_expense(std::list<purchase> li, total_expense tc){
    double total = accumulate(li.begin(),li.end(),0.0,tc);    //LINE-3
```

```
    return total;
}
```

```
int main(){
    int n, a, b;
    double c;
    std::list<purchase> li_pur;
    std::cin >> n;
    for(int i = 0; i < n; i++){
        std::cin >> a >> c >> b;   //read item_no, price and quantity
        purchase od(a, c, b);
        li_pur.push_back(od);
    }
    total_expense tc;
    std::cout << get_total_expense(li_pur, tc);
    return 0;
}
```

You may submit any number of times before the due date. The final submission will be considered for grading.

This assignment has Public Test cases. Please click on "Compile & Run" button to see the status of Public test cases. Assignment will be evaluated only after submitting using Submit button below. If you only save as or compile and run the Program , your assignment will not be graded and you will not see your score after the deadline.

Save as Draft | Compile & Run | Submit | Reset

Compilation : Passed

Public Test Cases: 2 / 2 Passed

Note: These tests may not be considered while scoring. Know more.

Public Test Cases	Input	Expected Output	Actual Output	Status
Test Case 1	2 101 50.0 4 102 100.5 5	702.5	702.5	Passed

W9_Programming_Qs-3 (/noc23_cs50/progassignment?name=207)

Download Videos ()

Books ()

Transcripts ()

Problem Solving Session ()

Test Case 2	4 101 20.0 10 102 50.5 10 103 100.0 1 104 33.0 5	970	970	Passed