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Test- Testvagrant

Solution of the code:-

```
#include <iostream>
```

```
#include <vector>
```

```
#include <cstring>
```

```
using namespace std;
```

```
struct Item {
```

```
    string name;
```

```
    int quantity;
```

```
    int price;//Unit price in Rupees
```

```
};
```

```
class ShoppingCart {
```

```
private:
```

```
    vector<Item> item;
```

```
    int total_price;
```

```
public:
```

```
    ShoppingCart();
```

```
    void addItem(string name, int quantity, int price);
```

```
    void gst(float cost, float price);
```

```
    int getTotal();
```

```
};
```

```
ShoppingCart::ShoppingCart() {
```

```
    cout << "Shopping cart" << endl;
```

```
    total_price = 0;
```

```
}
```

```
void ShoppingCart::addItem(string name, int quantity, int price) {  
    for (int i = 0; i < item.size(); i++) {  
        if (item[i].name == name) {  
            item[i].quantity += quantity;  
            return;  
        }  
    }  
}
```

```
Item temp;  
temp.name = name;  
temp.quantity = quantity;  
temp.price = price;  
item.push_back(temp);  
}
```

```
void ShoppingCart::gst(float cost, float price)  
{  
    for (int i = 0; i < item.size(); i++){  
        if(price>500){  
            return (price - cost) * 100 / cost;  
        }  
        cout << "GST amount is = "<<gst(cost, price)<<" % ";  
    }  
}
```

```
int ShoppingCart::getTotal() {  
    total_price = 0;  
    for (int i = 0; i < item.size(); i++) {  
        total_price += item[i].quantity * item[i].price;  
    }  
    return total_price;  
}
```

```
}
```

```
int main() {
```

```
    ShoppingCart cart;
```

```
    cart.addItem("Leather wallet", 1, 1100);
```

```
    cart.addItem("Umbrella", 2, 900);
```

```
    cart.addItem("Cigarette", 3, 200);
```

```
    cart.addItem("Honey",4,100);
```

```
    cout << "Total amount paid to be shopkeeper: " << cart.getTotal() << endl;
```

```
    cart.gst();
```

```
}
```