

#Problem 1

```
cart = [{"product":'p1', "price":100}, {"product":'p2', 'price':200}, {"coupon":'c1', 'disc':40}, {"product":'p3', 'price':400}, {"coupon":'c2', 'disc':10}, {"product":'p4', 'price':600}];
```

Get the final price of the cart, apply the coupon to the very previous item in the cart. The coupon discount value is in percentage.

```
lastprice=0
```

```
pr = 0
```

```
for c in cart:
```

```
    if("coupon" in c):
```

```
        pr-=(lastprice*c["disc"])/100
```

```
    if("product" in c):
```

```
        lastprice = c["price"]
```

```
        pr+=lastprice
```

```
print(pr)
```

//Problem 2

//Reverse a LinkedList

```
#include<iostream>
```

```
using namespace std;
```

```
struct Node{
```

```
    int val;
```

```
    struct Node* next;
```

```
    Node(int data){
```

```
        this->val = data;
```

```
        next = NULL;
```

```
    }
```

```
};
```

```
struct LinkedList{
```

```
    Node* head;
```

```
    LinkedList(){
```

```
        head=NULL;
```

```
    }
```

```
    void reverse(){
```

```
        Node *curr = head;
```

```
        Node *prev = NULL;
```

```
        Node *next = NULL;
```

```
        while(curr!=NULL){
```

```
            next = curr->next;
```

```
// 1 2 3 4 5
```

```
            curr->next = prev;
```

```
            prev = curr;
```

```
            curr = next;
```

```
        }
```

```
        head = prev;
```

```
    }
```

```
    void push(int data){
```

```
        Node* temp = new Node(data);
```

```
        temp->next = head;
```

```
        head = temp;
```

```
    }
```

```
    void print(){
```

```
        struct Node* temp = head;
```

```
        while(temp!=NULL){
```

```
            cout<<temp->val<<" ";
```

```
            temp = temp->next;
```

```
    }  
}
```

```
};
```

```
int main(){
```

```
    Linkelist l1;  
    l1.push(10);  
    l1.push(20);  
    l1.push(30);  
    l1.push(40);
```

```
    // l1.reverse();  
    l1.print();
```

```
}
```