

Assignemt 3

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Discounts and Pricing

1) Check Discount Eligibility

Write a program to check if a customer is eligible for a discount. If the total purchase is more than 100\$, apply a 10% discount and display the final price. otherwise, display the total price as it is.

```
item1=float(input("Enter the item price: "))
item2=float(input("Enter the item price: "))
item3=float(input("Enter the item price: "))
item4=float(input("Enter the item price: "))
item5=float(input("Enter the item price: "))

total=item1+item2+item3+item4+item5

#as per rate of 08 Dec 2024
contodoller=int(total/278)

if contodoller > 100:
    pay=contodoller*0.10
    totalbill=int(contodoller-pay)

    print(f"""
        Markhorian Brands Collection
        _____
        Total Bill      :    {contodoller}
        Discount        :    {pay}
        Payable         :    {totalbill}

        Thank you for shopping with us """)
else:
    print(f"""

        Markhorian Brands Collection
```

```
Total Bill    : {contodoller}
Payable      : {contodoller}
```

```
Thank you for shopping with us """)
```

```
Enter the item price: 4500
Enter the item price: 7000
Enter the item price: 8000
Enter the item price: 15000
Enter the item price: 4500
```

```
Markhorian Brands Collection
```

```
Total Bill    : 140
Discount      : 14.0
Payable       : 126
```

```
Thank you for shopping with us
```

2) Calculate Bulk Discount

If a customer buys more than 5 items, apply a 15% discount on the total price. Otherwise, no discount is applied. Display the total price.

```
Shop={"Charge":2500,"Mobile":25000,"Handfree":450,"Airdots":1500,"Laptop":50000}
```

```
print(Shop)
item1=(input("Enter the item name: ")).capitalize()
quantity=int(input("Enter the quantity: "))
discount=0
pay=0
if item1 in Shop:
    total=Shop[item1]*qunatity
    if quantity>5:
        discount=total*0.15
        pay=total-discount
    else:
        discount=0
        pay=total-discount
else:
    print("Item is not available.")
```

```
print(f"""
    Markhorian Brands Collection
    _____

    Item Name      :    {item1}
    Price          :    {Shop[item1]}
    Quantity       :    {quantity}
    Discount       :    {discount}
    Payable        :    {pay}""")

{'Charge': 2500, 'Mobile': 25000, 'Handfree': 450, 'Airdots': 1500,
'Laptop': 50000}
Enter the item name: charge
Enter the quantity: 6

    Markhorian Brands Collection
    _____

    Item Name      :    Charge
    Price          :    2500
    Quantity       :    6
    Discount       :    2250.0
    Payable        :    12750.0
```

3) Membership Discount

If a customer is a member. He gets a 20% Discount. Non-members get a 5% Discount. Calculate and print the discounted price.

```
print(Shop)

item1=input("Enter the name of item: ").capitalize()
discount=0
total=0
pay=0

if item1 in Shop:
    member=input("Are you a member: ").capitalize()
    total=Shop[item1]
    if member=="Yes":
        discount=total*0.20
        pay=total-discount
    else:
        discount=total*0.5
```

```

        pay=total-discount
else:
    print(f"{item1} is not available.")
print(f"""
        Huzaifa Electronics
        _____

        Item Name : {item1}
        Price      : {total}
        Discount   : {discount}
        Payable    : {pay}""")
{'Charge': 2500, 'Mobile': 25000, 'Handfree': 450, 'Airdots': 1500,
'Laptop': 50000}
Enter the name of item: charge
Are you a member: yes

```

Huzaifa Electronics

Item Name : Charge
Price : 2500
Discount : 500.0
Payable : 2000.0

4) Seasonal Sale

If today is holiday, apply a 25% discount else 10% is applied. Calculate the price after discount.

```

print(Shop)
item1=input("Enter the name of item: ").capitalize()
discount=0
pay=0
total=0
holiday="November"

if item1 in Shop:
    total=Shop[item1]
    Holidaycheck=input("What is the month.").capitalize()
    if Holidaycheck==holiday:
        discount=total*0.25
        pay=total-discount
    else:
        discount=total*0.10

```

```

        pay=total-discount
else:
    print("Item is not available.")

print(f"""
    Huzaifa Electronics
    _____

    Item Name : {item1}
    Price      : {total}
    H/Discount: {discount}
    Payable    : {pay}""")
{'Charge': 2500, 'Mobile': 25000, 'Handfree': 450, 'Airdots': 1500,
'Laptop': 50000}
Enter the name of item: charge
What is the month:november

```

Huzaifa Electronics

Item Name : Charge
 Price : 2500
 H/Discount: 625.0
 Payable : 1875.0

5) Buy-One Get-One Free

If a customer buys an even number of items, They get half of them for free. Otherwise they pay for all.

```

print(Shop)

item1=input("Enter the name of item: ").capitalize()
discount=0
total=0
pay=0

if item1 in Shop:
    qty=int(input("Enter the quantity: "))
    total=Shop[item1]*qty
    if (qty%2)==0:
        discount=total*0.50
        pay=total-discount

```

```

else:
    discount=total*0
    pay=total-discount
else:
    print("The item is not available.")

print(f"""
    Huzaifa Communications
    _____

    Item Name   : {item1}
    Price       : {Shop[item1]}
    Quantity    : {qty}
    Total       : {total}
    Discount    : {discount}
    Payable     : {pay}""")

{'Charge': 2500, 'Mobile': 25000, 'Handfree': 450, 'Airdots': 1500,
'Laptop': 50000}
Enter the name of item: charge
Enter the quantity: 6

```

```

Huzaifa Communications
_____

```

```

Item Name   : Charge
Price       : 2500
Quantity    : 6
Total       : 15000
Discount    : 7500.0
Payable     : 7500.0

```

Tax Calculations

6) Sales Tax

If the price an item is greater than \$500, apply a luxury of 15%.
Otherwise standard tax of 8%. Display the total price after tax.

```

print(Shop)

item1=input("Enter the name of item: ").capitalize()
total=0

```

```

discount=0
pay=0

if item1 in Shop:
    convt=Shop[item1]/278
    total=int(convt)
    if total > 500:
        discount=total*0.20
        pay=total+discount
    else:
        discount=total*0.10
        pay=total+discount
else:
    print("Item is not available.")

print(f"""
        Huzaifa Electronics
        _____

        Item Name : {item1}
        Price      : {total}
        Sales Tax  : {discount}
        Payable    : {pay} """)

{'Charge': 2500, 'Mobile': 25000, 'Handfree': 450, 'Airdots': 1500,
'Laptop': 50000}
Enter the name of item: Charge

```

```

        Huzaifa Electronics
        _____

        Item Name : Charge
        Price      : 8
        Sales Tax  : 0.8
        Payable    : 8.8

```

7) Income Tax

If a person's annual income is above \$50000 they pay 20% tax. Otherwise they pay 10%. Calculate and display the tax ammount.

```

Yinc=int(input("Enter your annual income: "))
tax=0

if Yinc > 50000:

```

```

    tax=Yinc*0.20
    finc=Yinc-tax
else:
    tax=Yinc*0.10
    finc=Yinc-tax

print(f"Your annual income after tax is {int(finc)}.")

```

Enter your annual income: 55000
Your annual income after tax is 44000.

8) Tax Bracket

Write a program to categorize a person into tax brackets.

```

Inc=int(input("Enter you income: "))
tax=0

if Inc > 100000:
    tax="High Tax"
elif Inc > 30000:
    tax="Medium Tax"
else:
    tax="Low Tax"

print(tax)

```

Enter you income: 45000
Medium Tax

9) VAT Calculation

If the item is marked as essential, apply a VAT of 5%. Otherwise apply a VAT of 12%. Display the final price.

```

Shop={"Bread":20,"Flour":500,"Sugar":150,"Cigarrate":15}
print(Shop)
item=input("Enter the name of item: ").capitalize()
esscheck=input("Is the item essential for life: ").capitalize()
vat=0
price=0

if esscheck=="Yes":
    vat=Shop[item]*0.05
    price=Shop[item]+vat
else:

```



```

    vat=Shop[item]*0.12
    price=Shop[item]+vat

print(f"The price of item after VAT is {price}")

{'Bread': 20, 'Flour': 500, 'Sugar': 150, 'Cigarrate': 15}
Enter the name of item: cigarrate
Is the item essential for life: no
The price of item after VAT is 16.8

```

10) Tax-Free Day

If today is a tax-free day, Display the original price. Otherwise, add a 7% tax.

```

ip=int(input("Enter the price of item: "))
taxfree=input("Is today the tax-free day: ").capitalize()
price=0
tax=0

if taxfree=="Yes":
    price=ip
else:
    tax=ip*0.07
    price=ip+tax

print(price)

Enter the price of item: 1500
Is today the tax-free day: no
1605.0

```

Shopping and Billing

11) Free Shipping

If the total purchase amount is more than 50usd, Offer free shipping else charge 5usd.

```

amazon={"Laptop":50000,"Airpods":1500,"Television":20000,"Mic":2500}
print(amazon)

item=input("Enter the name of item: ").capitalize()

```

```
cvtdlr=amazon[item]/278
price=0
ship=0
```

```
if cvtdlr>50:
    ship=0
    price=cvtdlr+ship
else:
    ship=5
    price=cvtdlr+ship
```

```
print(f"""
```

Amazon Good/Products

Item Name : {item}
Item Price : {int(cvtdlr)}\$
Ship Fee : {ship}\$
Payable : {int(price)}\$

Thank You
For Shopping
""")

```
{'Laptop': 50000, 'Airpods': 1500, 'Television': 20000, 'Mic': 2500}
Enter the name of item: airpods
```

Amazon Good/Products

Item Name : Airpods
Item Price : 5\$
Ship Fee : 5\$
Payable : 10\$

Thank You
For Shopping

12) Discount Code

If a customer enter the correct Discount Code, apply a 10% discount. Otherwise charge the full amount.

```
print(amazon)
item=input("Enter the item name: ").capitalize()
cvtdlr=int(amazon[item]/278)
dis=input("Enter the discount coupon code: ").upper()
price=0
discount=0
discd="DISCOUNT10"

if dis==discd:
    discount=cvtdlr*0.10
    price=cvtdlr-discount
    print(f"The price of item is {cvtdlr}. After the coupon the price is {price}.")
else:
    price=cvtdlr
    print(f"The price of the item is {price}")

{'Laptop': 50000, 'Airpods': 1500, 'Television': 20000, 'Mic': 2500}
Enter the item name: laptop
Enter the discount coupon code: discount10
The price of item is 179. After the coupon the price is 161.1.
```

13) Tiered Discount

Apply discount based on total price

```
print(amazon)
item=input("Enter the name of item: ").capitalize()
discount=0
cvtdlr=int(amazon[item]/278)
price=0

if cvtdlr>50:
    discount=cvtdlr*0.10
    price=cvtdlr-discount
    print(f"The total price is {cvtdlr}. Payable after discount 10% is {price}.")
elif cvtdlr>100:
    discount=cvtdlr*0.20
    price=cvtdlr-discount
    print(f"The total price is {cvtdlr}. Payable after discount 20% is {price}.")
```

```

else:
    discount=0
    price=cvtdlr-discount
    print(f"The total price is {cvtdlr}.")

{'Laptop': 50000, 'Airpods': 1500, 'Television': 20000, 'Mic': 2500}
Enter the name of item: mic
The total price is 8.

```

14) Minimum Purchase Requirement

If the total amount is less than 20, display a message: "Minimum purchase of 20 is required." Otherwise, display the total amount.

```

print(amazon)

item=input("Enter the name of item: ").capitalize()
cvtdlr=int(amazon[item]/278)

if cvtdlr<20:
    print("Minimum purchase of 20$ is required.")

else:
    print(f"Your total is {cvtdlr}$.")

{'Laptop': 50000, 'Airpods': 1500, 'Television': 20000, 'Mic': 2500}
Enter the name of item: airpods
Minimum purchase of 20$ is required.

```

15) Loyalty Points

If a customer is a loyal member (is_loyal = True), they earn double loyalty points for their purchase. Otherwise, they earn standard points.

```

print(amazon)

item=input("Enter the name of item: ").capitalize()
loychk=input("Are you a loyal customer.").capitalize()
loyal=1
price=amazon[item]
if loychk=="Yes":
    loyal=+2

```

```

else:
    loyal=+1

print(f"Your total is {price}.Your earned Loyalty points {loyal}")
{'Laptop': 50000, 'Airpods': 1500, 'Television': 20000, 'Mic': 2500}
Enter the name of item: laptop
Are you a loyal customer.no
Your total is 50000.Your earned Loyalty points 1

```

Travel and Tickets

16) Travel Discount

If a person is traveling more than 500 miles, offer a 20% discount on ticket price. Otherwise, charge the full amount.

```

ticketprice=20000
print(ticketprice)
discount=0
mchk=input("Are you travelling more than 500 miles: ").capitalize()

if mchk=="Yes":
    discount=ticketprice*0.20
    price=ticketprice-discount
    print(f"For travelling more than 500 miles you are discounted Rs.
{discount}. Your total price is {price}")
else:
    discount=0
    print(f"Your ticket price is {ticketprice}.")

20000
Are you travelling more than 500 miles: yes
For travelling more than 500 miles you are discounted Rs.4000.0. Your
total price is 16000.0

```

17) Child or Senior Discount

If a passenger is under 12 or over 60 years old, apply a 15% discount on the ticket price. Otherwise, charge the full price.

```

print(ticketprice)
age=int(input("Enter your age: "))

```

```

if age<12:
    discount=ticketprice*0.15
    price=ticketprice-discount
    print(f"You avail child discount of Rs.{discount}.Your total is
Rs.{price}")
elif age>60:
    discount=ticketprice*0.15
    price=ticketprice-discount
    print(f"You avail elderly discount of Rs.{discount}.Your total is
Rs.{price}")
else:
    print(f"You don't avail age discount.Your total is Rs.
{ticketprice}.")

20000
Enter your age: 11
You avail child discount of Rs.3000.0.Your total is Rs.17000.0

```

1) Ticket type Pricing

If the ticket is for a weekend (is_weekend = True), add a 10% surcharge. Otherwise, charge the standard price.

```

print(f"The ticket price is Rs.{ticketprice}.")
wchk=input("Is it weekend: ").capitalize()

if wchk=="Yes":
    scharge=ticketprice*0.10
    price=ticketprice+scharge
    print(f"Due to weekends you have to pay Rs.{price}.")
else:
    print(f"You have to pay Rs.{ticketprice}.")

The ticket price is Rs.20000.
Is it weekend: yes
Due to weekends you have to pay Rs.22000.0.

```

19) Baggage Fee

If the total baggage weight is over 20kg, charge 10 per extra kilogram. Otherwise, no extra fee.

```

weight=int(input("Enter the weight: "))

```

```

if weight>20:
    eweight=weight-20
    charge=eweight*10
    print(f"You are overpacked {eweight} Kgs. You have to pay extra $
{charge}.")
else:
    print("Your are in the weight limit.")

```

Enter the weight: 25

Your are overpacked 5 Kgs. You have to pay extra \$50.

20) Early Bird Discount

If a ticket is booked more than 30 days in advance, apply a 10% discount. Otherwise, charge the full price.

```

echk=int(input("How many days ago you have booked the ticket: "))

if echk>30:
    print("For booking 30 days in advance you got a 10% discount.")
else:
    print("You got no discount.")

```

How many days ago you have booked the ticket: 15

You got no discount.

Grades and Performance

21) Pass or Fail

If a student scores 40 or more, print "Pass". Otherwise, print "Fail".

```

score=int(input("What is your score: "))

if score>=40:
    print("Pass")
else:
    print("Fail")

```

What is your score: 35

Fail

22) Grade Assignment

Based on students score, Assign grades

```
score=int(input("Enter your score: "))

if score >=90:
    print("Your Grade is A.")
elif score >=75:
    print("Your Grade is B.")
elif score >=50:
    print("Your Grade is C.")
else:
    print("You Failed the exam.")
```

```
Enter your score: 76
Your Grade is B.
```

23) Bonus Marks

If a student completes all assignments, add 5 bonus marks to their score. Otherwise, no bonus marks.

```
achk=input("Have You completed your assignments: ").capitalize()

if achk=="Yes":
    print("You got Bonus of 5 marks.")
else:
    print("You got no bonus points.")
```

```
Have You completed your assignments: yes
You got Bonus of 5 marks.
```

24) Attendance Eligibility

If a student's attendance is 75% or more, they are eligible to take the exam. Otherwise, they are not.

```
att=int(input("Enter your overall attendance: "))

if att>=75:
    print("You are allowed to take the exam.")
else:
    print("Try again next year.")
```



```
Enter your overall attendance: 74  
Try again next year.
```

25) Scholarship Eligibility

If a student's grade is "A" and their annual family income is below 30,000, they are eligible for a scholarship. Otherwise, they are not.

```
income=int(input("Enter your family income: "))  
gchk=input("Enter your grade: ").capitalize()  
  
if income<=30000 and gchk=="A":  
    print("You are eligible for scholarship.")  
else:  
    print("You are ineligible.")
```

```
Enter your family income: 25000  
Enter your grade: a  
You are eligible for scholarship.
```