Question 1. Discount Calculator, Write a program that takes the price of a product as input. If the price is greater than ₹500, apply a 10% discount; otherwise, apply a 5% discount. Display the final price.

In [20]:
```
p = int(input('Enter a price'))
if p>500:
    p = (p-(p*0.10))
    print(p)
else:
    p = (p-(p*0.05))
    print(p)
```

```
380.0
```

Question 2. Odd or Even, Take the user's age as input. If the age is 18 or above, display "Eligible to drive"; otherwise, display "Not eligible to drive."

In [2]:
```
a = int(input('Enter a value'))
if a%2==0:
    print("Even")
else:
    print("Odd")
```

```
Even
```

Question 3. Driving Eligibility Take the user's age as input. If the age is 18 or above, display "Eligible to drive"; otherwise, display "Not eligible to drive."

In [4]:
```
a = int(input('Enter your age'))
if a>=18:
    print("Eligible to Drive")
else:
    print("Not eligible to drive")
```

```
Not eligible to drive
```

Question 4. Store Timing, Write a program that asks the current time (24-hour format). If the time is between 9 AM and 9 PM, print "Store is open"; otherwise, print "Store is closed."

Question 5. Pass or Fail, Take the user's marks as input. If the marks are 40 or above, print "Pass"; otherwise, print "Fail."

In [6]:
```
a = int(input("Enter the marks"))
if a>=40:
    print("Pass")
else:
    print("Fail")
```

```
Pass
```

Question 6. Prime Membership, Write a program that asks if the user has a Prime membership. If the user enters "yes," offer free delivery; otherwise, charge ₹50 for delivery.

In [10]:
```
a = str(input("Do you have Prime Membership:"))
if a=="Yes"or a=="yes":
    print("You are eligible for free delivery")
else:
    print("I am so sorry! You are not eligible for a free delivery 50 rupees per de
```

```
I am so sorry! You are not eligible for a free delivery 50 rupees per deliver will b
e charged for non Prime Members
```

Question 7. Leap Year Checker, Take a year as input. Check if it is a leap year or not using an if-else statement.

In [12]:
```
a = int(input("Enter the year"))
if a%4==0:
    print("Yes, It is a leap year")
else:
    print("No, It is not a Leap year")
```

```
Yes, It is a leap year
```

Question 8. Temperature Alert, Take the current temperature as input. If the temperature is above 40°C, display "Heat Alert"; if it's below 0°C, display "Cold Alert"; otherwise, display "Normal Weather."

In [16]:
```
a = int(input("Enter the temperature"))
if a>=40:
    print("Heat Alert")
elif a<0:
    print("Cold Alert")
else:
    print("Normal Weather")
```

```
Cold Alert
```

Question 9. Grade Calculator, Ask the user for their percentage marks. Use if-else statements to print the grade based on the following: 90% and above: A+ 80%–89%: A 70%–79%: B Below 70%: C

In [24]:
```
marks = int(input("Enter the marks obtained by the student:"))
if marks >= 90:
    print("Grade is A")
elif marks >= 80 and marks < 89:
    print("Grade is A")
elif marks >= 70 and marks < 79:
    print("Grade is B")
elif marks < 70 and marks > 0:
    print("Grade is C")
else:
    print("This student has Failed")
```

```
This student has Failed
```

Question 10. Bank Withdrawal, Take the balance in a bank account and the amount the user wants to withdraw as input. If the withdrawal amount is less than or equal to the balance, print "Withdrawal successful"; otherwise, print "Insucient balance."

In [ ]:
```python
# Bank Withdrawal
amount = float(input("Enter the amount that you want to Withdraw:"))
balance = float(input("Enter the Total Balance:"))
if amount <= balance:
    print("Withdraw Succesful")
else:
    print("Insufficiennt Balance")
```

```
Insufficiennt Balance
```

Question 11. Number Comparison, Ask the user to input two numbers. Print whether the 1st number is greater, smaller, or equal to the second number.

In [27]:
```python
a = int(input("Enter the first number"))
b = int(input("Enter the second number"))
if a>b:
    print("The first number is greater than the second number")
elif a==b:
    print("Both numbers are equal")
elif a<b:
    print("The first number is smaller than the seccond number")
else:
    print("Enter a valiid number")
```

```
The first number is greater than the second number
```

Question 12. Password Validator, Ask the user to input a password. If it matches a predened password (e.g., "secure123"), print "Access granted"; otherwise, print "Access denied."

In [12]:
```python
a = str(input("Enter a valid password to access the files"))
if a == "Secure123":
    print("Access Granted")
else:
    print("Access Denied")
```

```
Access Denied
```

Question 13. Evening Discount, If the current time is between 6 PM and 9 PM, apply a 20% discount on the product price entered by the user. Otherwise, no discount is applied.

Question 14. Eligible for Voting, Take the user's citizenship ("Indian" or "Other") and age as input. If the user is Indian and 18 or above, print "Eligible to vote"; otherwise, print "Not eligible to vote."

In [17]:
```python
a = str(input("Enter your citizenship"))
b = int(input("Enter your age"))
if a=="Indian":
```

```
    print()
if a=="Other":
    print()
if b>=18:
    print("Eligible to vote")
else:
    print("Not eligible to vote")
```

```
Eligible to vote
```

Question 15. Restaurant Bill Split, Ask the user for the number of people in a group. If it's greater than 5, apply a 15% service charge on the total bill amount entered by the user.

In [18]:
```
a = int(input("enter number of person present in the group:"))
b = float(input("Enter the amount of the bill: "))
if a>5:
    b =(b+(b*0.15))
    print(b)
```

```
948.75
```

Question 16. Delivery Service, Ask for the user's delivery location (as "urban" or "rural"). If the location is urban, display "Delivery available"; otherwise, display "Delivery not available."

In [19]:
```
# Delivery Service
a = str(input("Enter the area"))
if a=="Urban":
    print("Delivery available")
else:
    print("Delivery not available")
```

```
Delivery not available
```

Question 17. BMI Calculator,c Take the user's weight (in kg) and height (in meters) as input and calculate their BMI. If BMI < 18.5, display "Underweight"; 18.5–24.9, display "Normal"; otherwise, display "Overweight."

In [2]:
```
#BMI Calculator:
w = int(input("Enter your weight in kg's:"))
h = float(input("Enter your height in meters:"))
bmi = (w/(h*h))
if bmi < 18.5:
    print("Underweight")
elif bmi > 18.5 and bmi < 24.9:
    print("Normal")
else:
    print("Overweight")
```

```
Underweight
```

Question 19. Flight Fare Check, Take the age of a passenger as input. If the passenger is below 12 or above 60, apply a 50% discount on the fare entered by the user; otherwise, charge the full fare.

In [4]:
```
# Flight Fare Check
age = int(input("Enter your Age:"))
fare = int(input("Enter the Fare:"))
if age < 12 or age > 60:
    print(fare - (fare * 0.5))
else:
    print(fare)
```

```
2500.0
```

Question 20. Electricity Bill, Ask the user for the number of electricity units consumed. If units are: Less than or equal to 100: Charge ₹5 per unit. Between 101 and 300: Charge ₹10 per unit. Above 300: Charge ₹15 per unit.

In [13]:
```
# Electricity Bill Calculator
unit = int(input('Enter unit consumed in the month:'))
if unit<=100:
    print(unit*5)
if (unit>100) and (unit<300):
    print((unit-100)*5 + ((unit-100)*10))
if (unit)>300:
    print(2500+(unit-300)*15)
```

```
150
```