In [33]:
```
# 1. Ramesh’s basic salary is input through the keyboard.
# His dearness allowance is 40% of  basic salary, and house rent allowance is 2
# Write a program to  calculate his gross salary.
def Salary():
    try:

        ram_sal=eval(input("Enter the basic Salary of Ramesh"))
        da=(40*ram_sal)/100
        hra=(20*ram_sal)/100
        gross_sal=ram_sal+da+hra
        print(f"The total salary of Ramesh is {gross_sal} which consists of Dea
    except Exception as e:
        print(e)
Salary()
```

```
Enter the basic Salary of Ramesh100000
The total salary of Ramesh is 160000.0 which consists of Dear Allowance 4000
0.0, house rent allowance is 20000.0
```

In [34]:
```
# 2. The distance between two cities (in km.) is input through the keyboard.
# Write a program  to convert and print this distance in meters, feet, inches a

def Dist():
    try:
        City_1=eval(input("Enter the distance between two Cities in km"))
        meters= City_1/1000
        feet =meters/0.3048
        inches= feet*12
        cm=inches/2.54
        print(f"The distance between cities in Km is {City_1}, in meters is {me
    except Exception as e:
        print(e)
Dist()
```

```
Enter the distance between two Cities in km125
The distance between cities in Km is 125, in meters is 0.125, in feet is 0.41
01049868766404,in inches is 4.921259842519684, in centimeter is 1.93750387500
77498
```

In [36]:
```
# 3. If the marks obtained by a student in five different subjects are input th
# find out the aggregate marks and percentage marks obtained by the student.
# Assume that the maximum marks that can be obtained by a student in each subje

def Marks(m1,m2,m3,m4,m5):
    try:

        agg=(m1+m2+m3+m4+m5)/5
        per=agg
        print(f"The aggregate score is {agg} and the total percentage is {per}"
    except Exception as e:
        print(e)
Marks(eval(input("Enter the marks of subject m1: ")),eval(input("Enter the mark
```

```
Enter the marks of subject m1: 45
Enter the marks of subject m2: 45
Enter the marks of subject m3: 45
Enter the marks of subject m4: 54
Enter the marks of subject m5: 54
The aggregate score is 48.6 and the total percentage is 48.6
```

In [37]:
```
# 4. Temperature of a city in Fahrenheit degrees is input through the keyboard.
# Write a  program to convert this temperature into Centigrade degrees.

def city_temp():
    try:

        F=eval(input("Enter the Temperature of the city in Fahrenheit"))
        C=(F-32)/1.8
        print(f"The Temperature of the city in Celcious is {C} ")
    except Exception as e:
        print(e)

city_temp()
```

```
Enter the Temperature of the city in Fahrenheit56
The Temperature of the city in Celcious is 13.333333333333332
```

In [38]:
```
# 5. The length & breadth of a rectangle and radius of a circle are input throu
# Write a program to calculate the area & perimeter of the rectangle,
# and the  area & circumference of the circle.
import time
def Gemetry():
    try:

        length=eval(input("Enter the length of the reactangle: "))
        time.sleep(1)
        breadth=eval(input("Enter the  breadth of the reactangle: "))
        time.sleep(1)
        radius = eval(input("Enter the  radius of the cirle: "))
        time.sleep(1)
        react= length*breadth
        cir=2*3.14*radius
        time.sleep(2)
        print(f"The area of a rectangle is {react} and the area of the circle i
    except Exception as e:
        print(e)

Gemetry()
```

```
Enter the length of the reactangle: 56
Enter the  breadth of the reactangle: 65
Enter the  radius of the cirle: 5
The area of a rectangle is 3640 and the area of the circle is 31.400000000000
002
```

In [39]:
```
# 6. Two numbers are input through the keyboard into two locations C and D.
# Write a  program to interchange the contents of C and D.
import time
def interchange():
    try:
        C= eval(input("Enter the value of C: "))
        D= eval(input("Enter the value of D: "))
        time.sleep(1)
        print(f"The value of C is {C} and the value of D is {D}")
        X=C
        C=D
        D=X
        time.sleep(2)
        print(f"The value of C is {C} and the value of D is {D} after switching
    except Exception as e:
        print(e)
interchange()
```

```
Enter the value of C: 56
Enter the value of D: 58
The value of C is 56 and the value of D is 58
The value of C is 58 and the value of D is 56 after switching
```

```
# 7. If a five-digit number is input through the keyboard, write a program to
reverse the  number.
try:
    n1 = eval(input("Enter a five-digit number: "))
```

```
    if 10000 <= n1 <= 99999:

        R=(n1%10)
        t1=R*1000
        Q=n1/10
        R1=R%10
        t2=R1*100
        Q1=Q/10
        R2=R1%10
        t3=R2*10
        Q2=Q1%10
        t4=Q2
        final=t1+t2+t3+t4
        print(f"The number which is entered is {n1} and the reversed number is
{final} ")

except Exception as e:
        print(e)
```

In [15]:
```
# 7. If a five-digit number is input through the keyboard, write a program to r
try:
    n1 = eval(input("Enter a five-digit number: "))

    if 10000 <= n1 <= 99999:
        Q=n1//10
        R=(n1%10)
        t1=R*10000
        print(t1)

        Q1=Q//10
        R1=Q%10
        t2=R1*1000
        print(t2)

        Q2=Q1//10
        R2=Q1%10
        t3=R2*100
        print(t3)

        R3=Q2%10
        Q3=Q2//10
        t4=R3*10
        print(t4)

        R4=Q3%10
        Q4=Q3//10
        t5=R4*10

        final=t1+t2+t3+t4+R4
        print(f"The number which is entered is {n1} and the reversed number is
    else:
        print("The number is not in our expected range")

except Exception as e:
        print(e)
```

```
Enter a five-digit number: 12345
50000
4000
300
20
The number which is entered is 12345 and the reversed number is 54321
```

In [41]:
```
# 8. If a four-digit number is input through the keyboard,
# write a program to obtain the sum of  the first and last digit of this number
try:
    nu2 = int(input("Enter a four-digit number: "))
    if 1000 <= nu2 <= 9999:
        first_digit = nu2 // 1000
        last_digit = nu2 % 10
        sum_first_last = first_digit + last_digit
        print("Sum of first and last digit:", sum_first_last)
    else:
        print("Please enter a valid four-digit number.")
except Exception as e:
        print(e)
```

```
Enter a four-digit number: 1245
Sum of first and last digit: 6
```

In [42]:
```
# 9. In a town, the percentage of men is 52.
# The percentage of total literacy is 48.
# If total  percentage of literate men is 35 of the total population,
# write a program to find the total  number of illiterate men and women if
# the population of the town is 80,000.
try:
    total_population = 80000
    percentage_men = 52
    percentage_total_literacy = 48
    percentage_literate_men = 35


    men_population = (percentage_men / 100) * total_population
    literate_men = (percentage_literate_men / 100) * total_population
    literate_women = (percentage_total_literacy / 100) * total_population - lit
    illiterate_men = men_population - literate_men
    illiterate_women = total_population - literate_men - literate_women
    print("Total number of illiterate men:", int(illiterate_men))
    print("Total number of illiterate women:", int(illiterate_women))
except Exception as e:
        print(e)
```

```
Total number of illiterate men: 13600
Total number of illiterate women: 41600
```

In [43]:
```
# 10. A cashier has currency notes of denominations 10, 50 and 100.
# If the amount to be  withdrawn is input through the keyboard in hundreds,
# find the total number of currency  notes of each denomination the cashier wil
# to give to the withdrawer.
                    # try:
                    #     amount_in_hundreds = eval(input("Enter the amount to

                    #     num_100s = amount_in_hundreds
                    #     num_50s = (amount_in_hundreds % 10) * 5
                    #     num_10s = (amount_in_hundreds % 5) * 10

                    #     print("Number of 100s:", num_100s)
                    #     print("Number of 50s:", num_50s)
                    #     print("Number of 10s:", num_10s)
                    # except Exception as e:
                    #         print(e)
```

```
Enter the amount to be withdrawn in hundreds: 500
Number of 100s: 500
Number of 50s: 0
Number of 10s: 0
```

In [ ]: