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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 20% of basic salary.
# 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 Dear Allowance {da} and House Rent Allowance {hra}")
    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 40000.0, house rent allowance is 20000.0

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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 and centimeters.
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 {meters}, in feet is {feet}, in inches is {inches}, in centimeter is {cm}")
    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 0.4101049868766404, in inches is 4.921259842519684, in centimeter is 1.9375038750077498

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*

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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
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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
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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.*

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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 Celcius is {C} ")
    except Exception as e:
        print(e)

city_temp()
```

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Enter the Temperature of the city in Fahrenheit56
The Temperature of the city in Celcius is 13.333333333333332
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In [38]: # 5. The Length & breadth of a rectangle and radius of a circle are input through the keyboard.
# 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 is {cir}")
    except Exception as e:
        print(e)

Gemetry()
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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
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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()
```

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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
```

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In [40]: # 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:

        reversed_n1 = int(str(n1)[::-1])
        print("Reversed number:", reversed_n1)
    else:
        print("Please enter a valid five-digit number.")
except Exception as e:
    print(e)
```

Enter a five-digit number: 12456  
Reversed number: 65421

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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

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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 - literate_men
    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

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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 will
# to give to the withdrawer.
try:
    amount_in_hundreds = eval(input("Enter the amount to be withdrawn in hundreds: "))

    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 [ ]:

