In [40]:
```
#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.

try:
    basic_salary=eval(input("enter the basic_salary:"))
    dearness_allowance=0.4*basic_salary
    house_rent_allowance=0.2*basic_salary
    gross_salary=basic_salary+dearness_allowance+house_rent_allowance
    print("gross_salary:",gross_salary)
except Exception as e:
    print(e)
```

```
enter the basic_salary:50000
gross_salary: 80000.0
```

In [41]:
```
#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.

try:
    distance_in_km=float(input("enter the distance between two citizen in km:"))
    meters=distance_in_km*1000
    feet=distance_in_km*4820.52
    inches=distance_in_km*2852.2
    centimeters=distance_in_km*20000
    print("distance in meters of{} is {}:",format(meters))
    print("distance in feet of{} is {}:",format(feet))
    print("distance in inches of{} is {}:",format(inches))
    print("distance in centimeters of{} is {}:",format(centimeters))
except Exception as e:
    print(e)
```

```
enter the distance between two citizen in km:15
distance in meters of{} is {}: 15000.0
distance in feet of{} is {}: 72307.8
distance in inches of{} is {}: 42783.0
distance in centimeters of{} is {}: 300000.0
```

In [ ]:
```
#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.

try:
    m1=eval(input("enter the students marks in 1st subjests:"))
    m2=eval(input("enter the students marks in 2nd subjests:"))
    m3=eval(input("enter the students marks in 3rd subjests:"))
    m4=eval(input("enter the students marks in 4th subjests:"))
    m5=eval(input("enter the students marks in 5th subjests:"))
    total_marks=m1+m2+m3+m4+m5
    percentage_marks=total_marks/100
    print("percentage_marks of all subjects {} is {}:".format(percentage_marks,total_marks/100))
    aggregate_marks=total_marks/100
    print("aggregate_marks of all subjects {} is {}:".format(aggregate_marks,total_marks/100))
    if m1>=90:
        print("the highest marks 1st subject marks {} is {}:".format(m1,m2,m3,m4,m5,percentage_marks,aggregate_marks))
    if m2>=80:
        print("the highest marks 2nd subject marks {} is {}:".format(m1,m2,m3,m4,m5,percentage_marks,aggregate_marks))
    if m3>=70:
        print("the highest marks 3rd subject marks {} is {}:".format(m1,m2,m3,m4,m5,percentage_marks,aggregate_marks))
    if m4>=60:
        print("the highest marks 4th subject marks {} is {}:".format(m1,m2,m3,m4,m5,percentage_marks,aggregate_marks))
    if m5>=50:
        print("the highest marks 5th subject marks {} is {}:".format(m1,m2,m3,m4,m5,percentage_marks,aggregate_marks))
    else:
        print('fail')
except Exception as e:
    print(e)
```

In [42]:
```
#Temperature of a city in Fahrenheit degrees is input through the keyboard. Write a
#program to convert this temperature into Centigrade degrees.

try:
    Fahrenheit=eval(input("enter the Temperature in Fahrenheit degrees:"))
    celsius=(Fahrenheit-32)*5/9
    print("Fahrenheit of {} is {} degree celsius:",format(celsius))
except Exception as e:
    print(e)
```

```
enter the Temperature in Fahrenheit degrees:60
Fahrenheit of {} is {} degree celsius: 15.555555555555555
```

In [43]:
```
#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 math
try:
    length=eval(input("enter the length of rectangle:"))
    breadth=eval(input("enter the breadth of rectangle:"))
    radius=eval(input("enter the radius of circle:"))
    area_rectangle=length*breadth
    area_perimeter=2*(length+breadth)
    area_circle=math.pi*radius**2
    area_circumference=2*(math.pi*radius)
    print("area_rectangle of {} is {}:",format(area_rectangle))
    print("area_perimeter of {} is {}:",format(area_perimeter))
    print("area_circle of {} is {}:",format(area_circle))
    print("area_circumference of {} is {}:",format(area_circumference))
except Exception as e:
    print(e)
```

```
enter the length of rectangle:5.5
enter the breadth of rectangle:4.5
enter the radius of circle:5
area_rectangle of {} is {}: 24.75
area_perimeter of {} is {}: 20.0
area_circle of {} is {}: 78.53981633974483
area_circumference of {} is {}: 16.283185307179586
```

In [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.

try:
    C=int(input("enter the value of C:"))
    D=int(input("enter the value of D"))
    A=C
    C=D
    D=A
    print("the value of C is{}:",format(C))
    print("the value of D is{}:",format(D))
except Exception as e:
    print(e)
```

```
enter the value of C:143
enter the value of D143
the value of C is{}: 143
the value of D is{}: 143
```

In [10]:
```
#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.#percentage_men=52
try:
    percentage_total_literate=48
    percentage_literate_men=35
    total_population=80000
    total_men=(percentage_men/100)*total_population
    total_women=total_population-total_men
    literate_men=(percentage_literate_men/100)*total_population
    illiterate_men=total_men-literate_men
    illiterate_women=total_women-(percentage_total_literate/100)*total_population
    print("total illiterate men is:",format(illiterate_men))
    print("total illiterate women is:",format(illiterate_women))
except Exception as e:
    print(e)
```

```
total illiterate men is: 13600.0
total illiterate women is: 0.0
```

In [47]:
```
#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:
    number = input("Enter a four-digit number:")
    if len(number) == 4 and number.isdigit():
        number = int(number)
        first_digit = number // 1000
        last_digit = number % 10
        sum_of_digits = first_digit + last_digit
        print(f"The sum of the first and last digits is: {sum_of_digits}")
    else:
        print("Please enter a valid four-digit number.")
except Exception as e:
    print(e)
```

```
Enter a four-digit number:8989
The sum of the first and last digits is: 17
```

In [52]:
```
#If a five-digit number is input through the keyboard, write a program to reverse the
#number.

try:
    number=input("enter a five_digits:")
    if len(number) == 5 and number.isdigit():
        number = int(number)
        reversed_number=0
        last_digit=number % 10
        reversed_number=reversed_number*10+last_digit
        number=number // 10
        second_digit=number % 10
        reversed_number=reversed_number*10+second_digit
        number=number // 10
        third_digit=number % 10
        reversed_number=reversed_number*10+third_digit
        number=number // 10
        forth_digit=number % 10
        reversed_number=reversed_number*10+forth_digit
        number=number // 10
        fifth_digit=number % 10
        reversed_number=reversed_number*10+fifth_digit
        number=number // 10
        print("enter the reversed number is {}:".format(reversed_number))
    else:
        print("Please enter a valid four-digit number.")
except Exception as e:
    print(e)
```

```
enter a five_digits:12345
enter the reversed number is 54321:
```

In [64]:
```
# 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 have to give to the withdrawer.

try:
    amount_in_hundred=eval(input("enter the amount to withdrawn in hundred:"))
    num_100=0
    num_50=0
    num_10=0
    if amount_in_hundred>0:
        if amount_in_hundred>=1:
            num_100=amount_in_hundred
            amount_in_hundred=0
    elif amount_in_hundred>=0.5:
        num_50=1
        amount_in_hundred=0.5
    else:
        num_10=1
        amount_in_hundred=0.1
    print("num of 100 is {}:",format(num_100))
    print("num of 50 is {}:",format(num_50))
    print("num of 10 is {}:",format(num_10))
except Exception as e:
    print(e)
```

```
enter the amount to withdrawn in hundred:5000
num of 100 is {}: 5000
num of 50 is {}: 0
num of 10 is {}: 0
```