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In [ ]:
                                             ASSIGNMENT-5- Functions With using Arguments
       # 1.wap to ask the user enter three numbers and calculate average?
In [ ]:
In [2]: def shruthi(num1,num2,num3):
            sum=num1+num2+num2
            avg=sum/3
            avg1=round(avg,2)
            print(f"average of three numbers is={avg1}")
        shruthi(45,23,89)
       average of three numbers is=30.33
In [ ]: # 2.find the area of circle
In [4]: import math
        def shruthi(r):
            area=math.pi*r*r
            area1=round(area,2)
            print(area1)
        shruthi(5)
       78.54
In [ ]: # 3.wap to ask user bill amount
        # ask the user howmuch tipyou want pay in percentage
        #calculate totalbill
In [6]: def shruthi(bill,tip):
            total=(bill+(bill*tip/100))
            print(total)
        shruthi(500,10)
       550.0
In [ ]: # 4.wap to ask the user to enter base and height and calculate the area of triangle
In [7]: def shruthi(b,h):
            area=(1/2)*b*h
            area1=round(area,3)
            print(area1)
        shruthi(4.3,5.2)
       11.18
In [ ]: # 5.wap to ask the user to enter length and breadth and calculate the area of rectang
In [8]: def shruthi(1,b):
            area=1*b
            area1=round(area,2)
            print(area1)
        shruthi(6.453,8.97)
       57.88
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In [ ]: # 6.find even number or odd number
 In [9]: def shruthi(num1):
             if num1%2==0:
                 print(f"{num1} is even")
                  print(f"{num1} is odd")
         shruthi(67)
        67 is odd
 In [ ]: # 7.Write a programme ask the user enter the distance
         # if distance greater than 25km
         # then enter the charge
         # print the total cost
         # otherwise
         # print free ride
In [11]: def distance1(distance, charge):
             if distance>25:
                 total_cost=charge*distance
                 print(f"the total cost is {total_cost}")
                 print("freeride")
         distance1(67,5)
        the total cost is 335
 In [ ]: # 8.Write a programme ask the user enter the distance
         # if distance greater than 25km
         # then enter the charge
         # print the total cost
         # otherwise
         # print free ride
         # implement by using random between(1,100)
In [12]: import random
         def distance(charge):
             distance=random.randint(1,100)
             if distance>25:
                 total_cost=charge*distance
                 print(f"the total cost is {total_cost}")
                 print("freeride")
         distance(6)
        the total cost is 570
 In [ ]: # 9.Write a programme ask the user enter the distance
         # cutoff distance enter 25
         # if distance greater than 25km
         # print("good news your charge is applicable for only remaining of 25")
         # chargeable distance=distance-cutoff
         #enter the charge
         # print the total cost
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# otherwise
         # print freeride
In [13]: def distance1(distance, charge):
             cutoff distance=25
             if distance>cutoff_distance:
                  print("good news your charge is applicable for only remaining of 25")
                 chargeable_distance=distance-cutoff_distance
                 total_cost=charge*chargeable_distance
                 print(f"the total cost is {total_cost}")
             else:
                 print("freeride")
         distance1(90,5)
        good news your charge is applicable for only remaining of 25
        the total cost is 325
 In [ ]: #10. Write a programme ask the user to enter course name
         # ask user to enter the institute
         # if the course equal to data science and institute equal to naresh it
         # then you are good
         # otherwise
         # you are bad
In [17]: def course(course_name,institute_name):
             if course_name=='data science' and institute_name=='naresh it':
                  print("You are good")
             else:
                  print("You are bad")
         course('data science', 'naresh it')
        You are good
 In [ ]: #11. Write a programme ask the user to enter randomnumber between 1 to 10, treat this
         #ask the user to enter another number from keyboard as number2
         # if number1 equals to number2
         # print you won
         # otherwise
         # print you lost
In [18]: def randomm(number2):
             number1=random.randint(1,10)
             if number1==number2:
                 print("You won")
                  print("You lost")
         randomm(5)
        You lost
 In [ ]: #12. Write a programme ask the user enter number
         # if number equal to 1 then print one
         # if number equal to 2 then print two
         # if number equal to 3 then print three
         # otherwise print enter a valid number
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In [19]: def match(number):
             if number==1:
                  print("one")
             elif number==2:
                  print("two")
             elif number==3:
                  print("three")
                  print("enter a valid number")
         match(3)
        three
 In [ ]: #13. Write a programme ask the user to enter
         # if the number is greater than zero, print positive
         # if the number is less than zero, print negative
         # otherwise print zero
In [20]: def posneg(number):
             if number>0:
                  print("positive")
             elif number<0:</pre>
                  print("negative")
             else:
                  print("zero")
          posneg(-9867)
        negative
 In [ ]: #14. Write a programme that ask the user to enter percentage marks 0 to 100
         # if percentage greater than 90, print A grade
         # if percentage between 75 to 90, print B grade
         # if percentage between 50 to 75, print C grade
         # if percentage between 35 to 50, print D grade
          # if percentage lessthan 35, print fail
In [21]: def marks(percentage):
             if percentage>=90:
                  print("A grade")
             elif percentage>=75:
                  print("B grade")
             elif percentage>=50:
                  print("C grade")
             elif percentage>=35:
                  print("D grade")
             else:
                  print("Fail")
         marks(75.99)
        B grade
 In [ ]: #15. Write a programme that asks user to enter age
         # if the age greater than 100 print you are lucky
         # if age greater than 75 print old age
         # if age between 50 to 75, print senior citizen
         # if age between 30 to50, print middle age
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# if age between 15to 30,print young age
#if age Lessthan 15,print kid
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In [22]:
    def age(age):
        if age>=100:
            print("You are lucky")
        elif age>=75:
            print("old age")
        elif age>=50:
            print("senior citizen")
        elif age>=30:
            print("middle age")
        elif age>=15:
            print("young age")
        else:
            print("kid")
        age(67.8890)
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senior citizen