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In [ ]:

In [ ]:

In [15]:   # Q1) write a program to print "Hello python"

In [2]:    print("Hello Python")

           Hello Python

In [16]:   # Q2) Write a Python program to do arithmetical operations addition and division.?

In [22]:   def arithmetical_operations(a,b):
               try:
                   add = int(a)+int(b)
                   div = int(a)/int(b)
                   print(f'the addition of two numbers a and b is {add}')
                   print(f'the division of two numbers a and b is {div}')
               except ValueError:
                   print("please enter the correct inputs")
                   a,b = input("enter the values of a and b").split()
                   arithmetical_operations(a,b)
               except ZeroDivisionError:
                   print("number can't be divisible by zero")

In [25]:   #case1: when correct inputs are given
           a,b = input("enter the values of a and b").split()
           arithmetical_operations(a,b)

           enter the values of a and b3 10
           the addition of two numbers a and b is 13
           the division of two numbers a and b is 0.3

In [26]:   #case2: when an invalid literal is given:
           a,b = input("enter the value of a and b").split()
           arithmetical_operations(a,b)

           enter the value of a and b2 tr
           please enter the correct inputs
           enter the values of a and b3 10
           the addition of two numbers a and b is 13
           the division of two numbers a and b is 0.3

In [29]:   #case 3: when a number is divisible by zero:
           a,b = input("enter the values of a and b").split()
           arithmetical_operations(a,b)

           enter the values of a and b2 0
           number can't be divisible by zero

In [28]:   #Q3) Write a Python program to find the area of a triangle?

In [39]:   def area_of_triangle(base,height):
               try:
                   area = (int(base)*int(height))/2
                   print(f'the area of the given triangle is {area}')
               except ValueError:
                   print("Enter the correct values of base and height")
                   base,height = input("enter the values of base and height").split()
                   area_of_triangle(base,height)

In [40]:   #Case1: when correct values are given:
           base,height = input("enter the values of base and height").split()
           area_of_triangle(base,height)

           enter the values of base and height2 3
           the area of the given triangle is 3.0

In [41]:   #Case2: when an invalid literal is given:
           base,height = input("enter the values of base and height").split()
           area_of_triangle(base,height)

           enter the values of base and height2 str
           Enter the correct values of base and height
           enter the values of base and height2 3
           the area of the given triangle is 3.0

In [42]:   #Q4) Write a Python program to swap two variables?

In [49]:   def swap(x,y):
               x,y = y,x
               print("swap is excuted!!")
               print(f'After swap function is excuted x and y are {x} {y}')

In [50]:   x,y = input("enter the variables for x and y").split()
           print(f'Before calling swap function x and y are {x} {y}')
           swap(x,y)

           enter the variables for x and y2 3
           Before calling swap function x and y are 2 3
           swap is excuted!!
           After swap function is excuted x and y are 3 2

In [51]:   #Q5) Write a Python program to generate a random number?

In [52]:   import random

In [66]:   beginning,end,step = input("enter the beginning end and step values").split()
           try:

               number = random.randrange(int(beginning),int(end),int(step))
               print(f'random number between {beginning} and {end} is : {number}')
           except ValueError as e :
               print(e)


           enter the beginning end and step values2 10 1
           random number between 2 and 10 is : 8

In [ ]:
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