WORKSHEET-1

**PYTHON**

# Q1 to Q8 have only one correct answer. Choose the correct option to answer your question.

1. Which of the following operators is used to calculate remainder in a division?

Ans-C) %

1. In python 2//3 is equal to?

Ans-B) 0

1. In python, 6<<2 is equal to?

Ans-C) 24

1. In python, 6&2 will give which of the following as output?
   1. 2
2. In python, 6|2 will give which of the following as output?

Ans-6

1. What does the finally keyword denotes in python?

Ans-the finally block will be executed no matter if the try block raises an error or not.

1. What does raise keyword is used for in python?

Ans-It is used to raise an exception.

1. Which of the following is a common use case of yield keyword in python?

Ans-in defining an iterator

Q9 and Q10 have multiple correct answers. Choose all the correct options to answer your question.

1. Which of the following are the valid variable names?

Ans-A) abc C) abc2

1. Which of the following are the keywords in python?
   1. Yield B) raise

# Q11 to Q15 are programming questions. Answer them in Jupyter Notebook.

1. Write a python program to find the factorial of a number.

Ans- #find the factorial of a number

num=int(input("Enter a number:"))

factorial=1

if num < 0:

print("factorial does not exist for negative numbers")

elif num == 0:

print("The factorial of 0 is 1")

else:

for i in range(1,num + 1):

factorial = factorial\*i

print("The factorial of",num,"is:",factorial)

1. Write a python program to find whether a number is prime or composite.

Ans- #find whether a number is prime or composite

num = int(input("Enter a number: "))

if num > 1:

for i in range(2,num):

if (num % i) == 0:

print(num,"is a composite number")

break

else:

print(num,"is a prime number")

else:

print(num,"is a composite number")

1. Write a python program to check whether a given string is palindrome or not.

Ans- #whether a given string is palindrome or not

my\_str=input("enter a string:")

my\_str = my\_str.casefold()

rev\_str = reversed(my\_str)

if list(my\_str) == list(rev\_str):

print("The given string is a palindrome.")

else:

print("The given string is not a palindrome.")

1. Write a Python program to get the third side of right-angled triangle from two given sides.

Ans- #find the third side of a right-angled triangle from two given side

#find the third side of a right-angled triangle from two given sides

def pythagoras(opposite\_side,adjacent\_side,hypotenuse):

if opposite\_side == str("x"):

return ("Opposite = " + str(((hypotenuse\*\*2) - (adjacent\_side\*\*2))\*\*0.5))

elif adjacent\_side == str("x"):

return ("Adjacent = " + str(((hypotenuse\*\*2) - (opposite\_side\*\*2))\*\*0.5))

elif hypotenuse == str("x"):

return ("Hypotenuse = " + str(((opposite\_side\*\*2) + (adjacent\_side\*\*2))\*\*0.5))

print(pythagoras(12,5,"x"))

print(pythagoras(12,"x",13))

print(pythagoras("x",5,13))

1. Write a python program to print the frequency of each of the characters present in a given string.

Ans- text=input("Enter the string: ")

res = {i : text.count(i) for i in set(text)}

print ("countof character :\n " + str(res))