Python Worksheet- 1

1) Which of the following operators is used to calculate reminder in the division?

Ans:- C) %

2) In python, 2//3 is equal to?

Ans:- B) 0

3) In python, 6<<2 is equal to?

Ans:- C) 24

4) In python, 6&2 will give which of the following as output?

Ans:- A)2

5) In python, 6|2 will give which of the following as output?

Ans:- D)6

6) What does the finally keyword denotes in python?

Ans:- C) the finally block will executed no matter if the try block raises an error or not

7) What does raise keyword is used for in python?

Ans:- A) It is used to raise an exception

8) Which of the following is a common use case of yield keyword in python?

Ans:- C). In defining the generator

9) Which of the following are the valid variables names?

Ans:- A) _abc & C)abc2

10) Which of the following are the keywords in the python?

Ans:- A) Yield B) Raise

11) Write the python program to find the factorial of a number?

Ans:- Python program

```
num= int(input("enter the 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)
```

12) Write the python program to find whether a number is prime or composite?

```
Ans:- num=int(input("number"))

      if num>1:
         for i in range (2,num):
            if (num%i)==0:
               print(num,"is not a prime number")
               break
         else:
            print(num,"is a prime number")
      if num==0 or 1:

         print(num,"is a nethier prime nor composite")

      else:
         print(num,'is not a prime number it is a composite number')
```

13) Write the python program to check whether a given string is palindrome or not

Ans:-

```
a=str(input(" word  "))
b=reversed(a)
if list(a)==list(b):
   print("the string is palindrome")
else:
   print("the string is not a palindrome")
```

14) Write the python program to get third side of right-angled triangle from the given two sides.

Ans:-

```
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))
        else:
            return "You know the answer!"


print(pythagoras(3,4,'x'))
print(pythagoras(3,'x',5))
print(pythagoras('x',4,5))
print(pythagoras(3,4,5))
```

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

Ans:-

```
str1 = input ("Enter the string: ")
d = dict()
for c in str1:
   if c in d:
```

```
        d[c] = d[c] + 1
    else:
        d[c] = 1
print(d)
```