PYTHON – WORKSHEET 1

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?
    C) %

2. In python 2//3 is equal to?
    B) 0

3. In python, 6<<2 is equal to?
    C) 24

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

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

6. What does the finally keyword denotes in python?
    C) the finally block will be executed no matter if the try block raises an error or not.

7. What does raise keyword is used for in python?
    A) It is used to raise an exception.

8. Which of the following is a common use case of yield keyword in python?
    A) in defining an iterator

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

9. Which of the following are the valid variable names?
    D) None of the above

10. Which of the following are the keywords in python?
    A) yield
    B) raise

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

11. Write a python program to 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)
```

12. Write a python program to 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 not a prime number")
           print(i,"times",num//i,"is",num)
           break
   else:
       print(num,"is a prime number")
else:
  print(num,"is not a prime number")
```

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

```
string=raw_input("Enter string:")
if(string==string[::-1]):
    print("The string is a palindrome")
else:
    print("The string isn't a palindrome")
```

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

```
        from math import sqrt
print("Input lengths of shorter triangle sides:")
a = float(input("a: "))
b = float(input("b: "))
c = sqrt(a**2 + b**2)
print("The length of the hypotenuse is:", c )
```

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

```
        def char_frequency(str1):
        dict = {}
    for n in str1:
        keys = dict.keys()
        if n in keys:
            dict[n] += 1
        else:
            dict[n] = 1
    return dict
print(char_frequency('string entered'))
```