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?
A) # B) &

C) % D) $

ANS- C) %

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

A) 0.666 B) 0
C) 1 D) 0.67

ANS- B) 0

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

A) 36 B) 10
C) 24 D) 45

ANS- C) 24

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

A) 2 B) True

C) False D) 0

ANS- A) 2

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

A) 2 B) 4

C) 0 D) 6

ANS- D) 6

6. What does the finally keyword denotes in python?

A) It is used to mark the end of the code
B) It encloses the lines of code which will be executed if any error occurs while executing the lines of code in the try block.

C) the finally block will be executed no matter if the try block raises an error or not.
D) None of the above

ANS- 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. B) It is used to define lambda function

C) it's not a keyword in python. D) None of the above

ANS- 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 B) while defining a lambda function

C) in defining a generator D) in for loop.

ANS- C) in defining a generator

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?
A) _abc B) 1abc

C) abc2 D) None of the above

ANS- C) abc2

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

A) yield B) raise

C) look-in D) all of the above

ANS- A) yield
B) raise

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

```
num = int(input())
factorial = 1
# check if the number is negative, positive or zero
if num < 0:
   print("Sorry, 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)
```

Output

```
5
The factorial of 5 is 120
```

```
# 12.write a python program to find whether a number is
 prime or composite

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

if num > 1:
   # check for factors
   for i in range(2,num):
       if (num % i) == 0:
           print(num,"is not a prime number. Thus it is
 composite number.")
           print(i,"times",num//i,"is",num)
           break
   else:
       print(num,"is a prime number")

# if input number is less than
# or equal to 1, it is not prime
else:
   print(num,"is not a prime number")
```

OUTPUT

```
Enter a number: 9
9 is not a prime number. Thus it is composite number.
3 times 3 is 9
```

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

```
string = input("Please enter your own String : ")
str1 = ""

for i in string:
    str1 = i + str1
print("String in reverse Order :  ", str1)

if(string == str1):
   print("This is a Palindrome String")
else:
   print("This is Not a Palindrome String")
```

OUTPUT

```
Please enter your own String : abc
String in reverse Order :   cba
This is Not a Palindrome String
```

14.write a python program to get the third side of right angled triangle from two given sides

```
a = float(input("Please enter first side of triangle "))

b = float(input("Please enter second side of triangle "))


c = a*a + b*b


print(c**0.5)
```

OUTPUT

```
Please enter first side of triangle 3
Please enter second side of triangle 4
5.0
```

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

```
input_string = input("Please enter your own String : ")

frequency_table = {}


for char in input_string:

    frequency_table[char] = frequency_table.get(char, 0) + 1


print ("Character frequency table for '{}' is :\n {}".format(input_string, str(frequency_table)))
```

OUTPUT

```
Please enter your own String : data
Character frequency table for 'data' is :
 {'d': 1, 'a': 2, 't': 1}
```