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:- 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?

A) _abc B) 1abc

C) abc2 D) None of the above

Ans:- A) _abc and 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

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

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

Ans:- input:number = 5

```
factorial = 1
if num < 0:
  print("factorial doesnt exist for negative numbers")
```

```
elif num == 0:
  print("The factorial of 0 is 1")
else:
  for i in range(1,number + 1):
      factorial = factorial*i
  print("The factorial of",number,"is",factorial)
```

output:The factorial of 5 is 120

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

Ans:- input:

```
number=int(input("Enter the number to find its prime or composite:"))
count=0
i=1
while i<=number:
   if number%i==0:
      count=count+1
   i=i+1

if count==2:
   print("Its a Prine Number: ")
elif count>2:
   print("Its a Composite Number: ")
else:
   print("The number is neither Prime nor Composite"
```

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

Ans:- Input:

```
a=input("enter string: ")
b=a[-1::-1]
if (a==b):
   print("it is a palindromic string")
else:
```

```
print("it is not a palindromic string")
```

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

Ans:-
```
Input: from math import sqrt
a=float(input("enter the length of first side of right angle triangle: "))
b=float(input("enter the length of second side of right angle triangle: "))
c=sqrt(a**2 + b**2)
print("the length of third side of right angle triangle is ", c)
```

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

Ans:-
```
input:str=input("enter string")
l=list(str)
freq=[l.count(ele) for ele in l]
d=dict(zip(l,freq))
print(d)
```