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?
   a) #
   b) &
   c) %
   d) $

Answer : c) %

2. In python 2//3 is equal to?
   a) 0.666
   b) 0
   c) 1
   d) 0.67

Answer : b) 0

3. In python, 6<<2 is equal to?
   a) 36
   b) 10
   c) 24
   d) 45

Answer : c) 24

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

c) False

d) 0

Answer : a) 2

5. In python, 6|2 will give which of the following as output?
   a) 2
   b) 4
   c) 0
   d) 6

Answer : 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

Answer : 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

Answer : 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.

Answer : 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

Answer : a) _abc

c) abc2

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

a) yield

b) raise

c) look-in

d) all of the above

Answer : 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.

Answer :

```
Number = int(input("Write Any number for Factorial Result \n"))
```

```
last_Number = 1

for f in range (1, Number+1):

    last_Number = last_Number*f

print("Answer is = %d" %last_Number)
```

Output:

Write Any number for Factorial Result

5

Answer is = 120

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

Answer :

```
def check(n):

    if n==1 or n==0 or (n % 2 == 0 and n > 2):
        return "Not prime"
    else:
        for i in range(3, int(n**(1/2))+1, 2):
            if n%i == 0:
                return "Not prime"
        return "Prime"

n=input('Enter the number you want to check: ')
try:
    n=int(n)
except:
    print('Wrong input.')
```

```
    quit()
if n==1 or n==0:
    print('This is neither prime nor composite')
else:
    c=0
    for i in range(2,n):
        if n%i==0:
            c=c+1
    if c==0:
        print("This is a prime number")
    else:
        print('This  is a composite number.')
```

Output:

Enter the number you want to check: 5

This is a prime number

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

Answer :

```
def poli(s):
    return s == s[::-1] # here we are checking if sequence of string is correct in reverse
order


Text = input()
ans = poli(Text)
```

```
if ans:
    print("Yes")
else:
    print("No")
```

Output:

hanah

Yes

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

Answer :

```
def SIDE_3(side1, side2):

    s3 = (((side1 * side1) + (side2 * side2))**(1/2))
    return s3

side1 = int(input("Enter First Side Length \n"))
side2 = int(input("Enter second Side Length \n"))

print("\n Third Side = " , SIDE_3(side1, side2))
```

Output:

Enter First Side Length

12

Enter second Side Length

25

Third Side = 27.730849247724095

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

Answer :

```
string = input()

print("Given String: ",string)

counting_Dect = {}

for char in string:

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

# Result

print("Frequency of character :\n ", counting_Dect)
```

Output:

Requesting to check character frequency

Given String: requesting to check character frequency

Frequency of character:

{'r': 4, 'e': 7, 'q': 2, 'u': 2, 's': 1, 't': 3, 'i': 1, 'n': 2, 'g': 1, ' ': 5, 'o': 1, 'c': 5, 'h': 2, 'k': 1, 'a': 1, 'f': 1, 'y': 1}