WORKSHEET

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?

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

C) abc2

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.

```python
def factorial(n):
    if n == 0:
        return 1
    else:
        return n * factorial(n-1)

num = int(input("Enter a number: "))
print(f"The factorial of {num} is {factorial(num)}")
```

```
Enter a number:  10
The factorial of 10 is 3628800
```

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

```python
n=int(input('Enter a number:'))
if n>1:
    for i in range(2,n):
        if(n%i==0):
            print('Its a composite number')
            break
    else:
        print('Its a prime number')
```

```
Enter a number: 7
Its a prime number
```

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

```python
def palindrome(s):
    return s == s[::-1]

string =input("Enter a string: ")
if palindrome(string):
    print(f"{string} is a palindrome.")
else:
    print(f"{string} is not a palindrome.")
```

```
Enter a string:  Karan Patil
Karan Patil is not a palindrome.
```

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

```python
a =float(input("Enter the length of a:"))
b =float(input("Enter the length of b:"))
c=np.square(a)+np.square(b)
print(f"hypothesis of a right angle is :",c)
```

```
Enter the length of a: 2
Enter the length of b: 2
hypothesis of a right angle is : 8.0
```

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

```python
string = input("Enter the string")

for i in string:
    freq = string.count(i)
    print(str(i) + ": " + str(freq))
```

```
Enter the string Good Morning
G: 1
o: 3
o: 3
d: 1
 : 1
M: 1
o: 3
r: 1
n: 2
i: 1
n: 2
g: 1
```