Python worksheet -1

Q-1- Which of the following operators is used to calculate remainder in a division?

- ⇨ C) %

Q-2 -In python 2//3 is equal to?

- ⇨ B) 0

Q-3- In python, 6<<2 is

- ⇨ C) 24

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

- ⇨ A) 2

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

- ⇨ D)6

Q-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.

Q-7-What does raise keyword is used for in python?

- ⇨ A) It is used to raise an exception.

Q-8-Which of the following is a common use case of yield keyword in python?

- ⇨ C) in defining a generator

Q-9- Which of the following are the valid variable names?

- ⇨ _abc
- ⇨ Abc2

Q-10-Which of the following are the keywords in python?

- ⇨ Yield
- ⇨ Raise

In [73]:
```
#Q-11 : Find the factorial of a number
def factorial(n):
    if n <0:
        return 1
    elif n ==0 or n==1:
        return 1
    else :
        fact =1
        while(n>1):
            fact = fact*n
            n=n-1


        return fact

a = int(input("Enter the  number :"))
print("Factorial of", a , ' :' , factorial(a))
```

In [72]:
```
#Q-12 : Check if thr number is prime or composite
def checkPrime(n):
    if n >1:
        for i in range(2,int(n/2)+1):
            if (n%i)==0:
                print(n ," not prime")
                break
            else:
                print("number is prime")
    else:
        print("number is not prime")

number=5
print(checkPrime(number))
```

```
number is prime
None
```

In [70]:
```
#Q-13:Check wether string is palindrome or not
def checkPalindrome(str):
     for i in range(0, int(len(str)/2)):
        if str[i] != str[len(str)-i-1]:
            return False
     return True

s = "Sameer"
isPalindrome = checkPalindrome(s)
if(isPalindrome):
    print(str , " is palindrome")
else:
    print(str , " is not palindrome")
```

```
Sameer  is not palindrome
```

In [75]:
```python
#Q-14:get the third side of right angled triangle
import numpy as np

def thirdSide(a,b):
    c= np.sqrt((a*a)+(b*b))
    return c

print("third side of triangle is : " , thirdSide(10,20))
```

```
third side of triangle is :  22.360679774997898
```

In [77]:
```python
#Q-15: get the frquency of each characer in the string
def frequency(str):
    freq = {}

    for i in str:
        if i in freq:
            freq[i] += 1
        else:
            freq[i] = 1
    return freq



Str = "Sameer"
print( "Counts of each character is : " , frequency(str))
```

```
Counts of each character is :  {'S': 1, 'a': 1, 'm': 1, 'e': 2, 'r': 1}
```