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

  Ans) %

- In python 2//3 is equal to?

  Ans) 0.666

- In python, 6<<2 is equal to?

  Ans) 24

- In python, 6&2 will give which of the following

  Ans) 2

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

  Ans) 3

- What does the finally keyword denotes in python?

  Ans) he finally block will be executed no matter if the try block raises an error or not.

- What does raise keyword is used for in python?

  Ans) It is used to raise an exception.

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

  Ans) in defining a generator

- Which of the following are the valid variable names

  Ans) A and C

- Which of the following are the keywords in python?

  Ans) D

Write a python program to find the factorial of a number

```
n = 23
fact = 1

for i in range(1, n+1):
    fact = fact * i

print("The factorial of 23 is : ", end="")
print(fact)
```

```
The factorial of 23 is : 25852016738884976640000
```

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

```
In [10]: from math import sqrt

         # Number to be checked for prime
         n = 9

         flag = 0

         if(n > 1):
             for k in range(2, int(sqrt(n)) + 1):
                 if (n % k == 0):
                     flag = 1
                 break
             if (flag == 0):
                 print(n," is a Prime Number!")
             else:
                 print(n," is Not a Prime Number!")
         else:
             print(n," is Not a Prime Number!")
```

```
9  is a Prime Number!
```

Write a python program to check whether a given string is palindrome or no

In [11]:
```
def isPalindrome(s):
    return s == s[::-1]


s = "malayalam"
ans = isPalindrome(s)

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

```
Yes
```

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

]:
```
def pythagoras(opposite_side, adjacent_side, hypotenuse):
    if opposite_side == str("x"):
        return ("Opposite = " + str(((hypotenuse**2) - (adjacent_side**2))**0.5))
    elif adjacent_side == str("x"):
        return ("Adjacent = " + str(((hypotenuse**2) - (opposite_side**2))**0.5))
    elif hypotenuse == str("x"):
        return ("Hypotenuse = " + str(((opposite_side**2) + (adjacent_side**2))**0.5))
    else:
        return "You know the answer!"
```

]:
```
pythagoras(3,4,'x')
```

]:
```
'Hypotenuse = 5.0'
```

Write a python program to print the frequency of each of the characters presentin a given string.

In [18]:
```
test_str = "Asad is learning python"


all_freq = {}

for i in test_str:
    if i in all_freq:
        all_freq[i] += 1
    else:
        all_freq[i] = 1


print("Count of all characters in GeeksforGeeks is :\n "
      + str(all_freq))
```

```
Count of all characters in GeeksforGeeks is :
 {'A': 1, 's': 2, 'a': 2, 'd': 1, ' ': 3, 'i': 2, 'l': 1, 'e': 1, 'r': 1, 'n': 3, 'g': 1, 'p': 1, 'y': 1, 't': 1, '
h': 1, 'o': 1}
```