Q1) Which of the following operators is used to calculate remainder in a division?

Option (C) - %

Q2) In python 2//3 is equal to?

Option (A) - 0.6666

Q3) In python, 6<<2 is equal to?

Option (C) - 24 Q4) In python, 6&2 will give which of the following as output?

Option (A) - 2

Q5) In python, 6|2 will give which of the following as output?

Option (D) - 6

Q6) What does the finally keyword denotes in python?

Option (C) - the finally block will be executed no matter if the try block raises an error or not.

Q7) What does raise keyword is used for in python?

Option (A) - It is used to raise an exception.

Q8) Which of the following is a common use case of yield keyword in python?

Option (C) - in defining an iterator

Q9) Which of the following are the valid variable names?

Options A and C

Q10) Which of the following are the keywords in python?

Options A and B

Q11) Write a python program to find the factorial of a number?

In [1]:
```
factorial = 1
num  = int(input('Enter a number:  '))

if num == 0:
    print("The factorial of 0 is 1")

else:

    for i in range(1,num + 1):

        factorial = factorial*i

print("The factorial of",num,"is",factorial)
```

```
Enter a number:  7
The factorial of 7 is 5040
```

Q12) Write a python program to find whether a number is prime or composite.

In [2]:
```
n= int(input("Enter any number:"))
if(n ==0 or n == 1):
    printf(n," is neither prime nor composite")
elif n>1 :
    for i in range(2,n):
        if(n%i == 0):
            print(n,"is a composite number")
            break
    else:
        print(n," is a prime  number")
else :
    print("Please enter positive number only ")
```

```
Enter any number:7
7  is a prime  number
```

Q13) Write a python program to check whether a given string is palindrome or not.

In [3]:
```
string=input(("Enter a string:")).upper() # to remove case sensitivity from


if(string==string[::-1]):
      print(string,"is a palindrome")
else:
      print(string,"is not a palindrome")
```

```
Enter a string:Tenet
TENET is a palindrome
```

Q14) Write a Python program to get the third side of right-angled triangle from two given sides.

In [5]:
```
def rightangledtriangle(a,b,c):
        if a == str("x"):
            return ("a = " + str(((c**2) - (b**2))**0.5))
        elif b == str("x"):
            return ("b = " + str(((c**2) - (a**2))**0.5))
        elif c == str("x"):
            return ("c = " + str(((a**2) + (b**2))**0.5))
        else:
            return 'Nothing'
```

In [6]:
```
print(rightangledtriangle(3,4,'x'))
```

```
c = 5.0
```

In [7]:
```
print(rightangledtriangle(3,'x',4))
```

```
b = 2.6457513110645907
```

Q15) Write a python program to print the frequency of each of the characters present in a given string

In [8]:
```
def stringchar(s):

    all_freq = {}

    for i in s:

        if i in all_freq:
            all_freq[i] += 1
        else:
            all_freq[i] = 1
    print("Count of all characters in",s,":\n "+ str(all_freq))
```

In [9]:
```
stringchar('Misiisipi')
```

```
Count of all characters in Misiisipi :
 {'M': 1, 'i': 5, 's': 2, 'p': 1}
```

In [ ]:
```

```