In [1]:
```
# (1) Operator used to calculate remainder or division

6%5
```

Out[1]:
```
1
```

In [2]:
```
# (2) 2//3 is equal to

2//3
```

Out[2]:
```
0
```

In [3]:
```
# (3) 6<<2 is equal to

6<<2
```

Out[3]:
```
24
```

In [4]:
```
# (4) 6&2 is equal to

6&2
```

Out[4]:
```
2
```

In [5]:
```
# (5) 6|2 is equal to


6|2
```

Out[5]:
```
6
```

In [6]:
```
# (6) Use of Finally keyword in python

print("C) the finally block will be executed no matter if the try block raises an error or not")
```

```
C) the finally block will be executed no matter if the try block raises an error or not
```

In [7]:
```
# (7) Use of raise keyword in python

print("A) It is used to raise an exception")
```

```
A) It is used to raise an exception
```

In [8]:
```
# (8) Use of yeild keyword in python

print("C) in defining a generator")
```

```
C) in defining a generator
```

In [9]:
```
# (9) The valid variable definition

print("A) _abc, C) abc2")
```

```
A) _abc, C) abc2
```

In [10]:
```
# (10) Which of the following are the keywords in python? A) yield B) raise C) look-in D

print("A) yield, B) raise")
```

```
A) yield, B) raise
```

In [11]:
```
# (11) Write a python program to find the factorial of a number.

def factorial(n):
    return 1 if (n==1 or n==0) else n * factorial(n - 1);
num = 4;
print("Factorial of",num,"is",factorial(num))
```

```
Factorial of 4 is 24
```

In [14]:
```
# (12) Write a python program to find whether a number is prime or composite

num= int(input("Enter any number: "))
if num>1:
    for i in range(2, num):
        if (num%i)==0:
            print(num, "is a Composite Number")
            break
        else:
            print(num, "is a Prime Number")
elif num == 0 or 1:
    print(num, "is a neither prime NOR composite number")
else:
    print(num, "is NOT a prime number it is a COMPOSITE number")
```

```
Enter any number: 180
180 is a Composite Number
```

In [13]:
```
# (13) Write a python program to find whether a number is prime or composite

def isPalindrome(str):
    for i in range(0, int(len(str)/2)):
        if str[i] != str[len(str)-i-1]:
            return False
        else:
            return True
S= "racecar"
ans= isPalindrome(S)
if (ans):
    print("Yes")
else:
    print("No")
```

```
Yes
```

In [10]:
```
# (14) Write a Python program to get the third side of right-angled triangle from two given sides.

def pythagoras(OS,AJ,HY):
    if OS==str("x"):
        return("Opposite="+str(((HY*2)-(AJ**2))**0.5))
    elif AJ==str("x"):
        return("Ajacent="+str(((HY**2)-(OS**2))**0.5))
    elif HY==str("x"):
        return("Hypotenus="+str(((OS**2)+(AJ**2))**0.5))
print(pythagoras(3,4,'x'))
print(pythagoras(3,'x',5))
print(pythagoras(3,4,5))
```

```
Hypotenus=5.0
Ajacent=4.0
None
```

In [12]:
```
# (15) Write a python program to print the frequency of each of the characters present in a given string

string="ricardo"
F={}

for i in string:
    if i in F:
        F[i]+=1
    else:
        F[i]=1
print("Count all Characters in the string:"+str(F))
```

```
Count all Characters in the string:{'r': 2, 'i': 1, 'c': 1, 'a': 1, 'd': 1, 'o': 1}
```

In [ ]:
```

```