

```
In [3]: # 1 -Which of the following operators is used to calculate remainder in a division?
# ans = %
a=7
b=2
c=a%b
c
```

Out[3]: 1

```
In [4]: # 2 - In python 2//3 is equal to?
# ans = 0
a=2
b=3
c=a//b
c
```

Out[4]: 0

```
In [6]: # 3 - In python, 6<<2 is equal to?
# ans = 24
a=6
b=2
c=a<<b
c
```

Out[6]: 24

```
In [7]: # 4- In python, 6&2 will give which of the following as output?
a= 6
b=2
c=a&b
c
```

Out[7]: 2

```
In [8]: # 5 - In python, 6|2 will give which of the following as output?
a=6
b=2
c=a|b
c
```

Out[8]: 6

```
In [11]: # 6- What does the finally keyword denotes in python?
```

```
# ANS- the finally block will be executed no matter if the try block raises an error or no
```

```
In [13]: # 7 -What does raise keyword is used for in python?
```

```
# ANS - It is used to raise an exception
```

In [15]: # 8 - Which of the following is a common use case of yield keyword in python?

```
# ANS -in defining a generator
```

In [ ]: # 9 - Which of the following are the valid variable names?

```
# _abc
```

```
# abc2
```

In [16]: # 10- Which of the following are the keywords in python?

```
# ANS -
```

```
# yield    # raise
```

In [18]: #11 - Write a python program to find the factorial of a number.

```
import math
def factorial(n):
    return(math.factorial(n))
number=10
print('factorial of',number,'is',factorial(number))
```

factorial of 10 is 3628800

In [32]: # 12 - Write a python program to find whether a number is prime or composite

```
x=105
if x > 1:
    for val in range(2,int(x/2)):
        if(x%val)==0:
            print(x,'is a composite no')
            break

    else:
        print(x,'is a prime no')
else:
    print(x, 'is a composite no')
```

105 is a composite no

In [41]: # 13-Write a python program to check whether a given string is palindrome or not

```
def ispalindrome(a):
    rev=''.join(reversed(a))
    if (a== rev):
        return True
    return False
a='rar'
ans=ispalindrome(a)
if (ans):
    print('yes')
else:
    print('no')
```

yes

```

def pythagoras(height, base, hypotenuse):
    if height == str("x"):
        return ("height = " + str(((hypotenuse**2) - (base**2))**0.5))
    elif base == str("x"):
        return ("base= " + str(((hypotenuse**2) - (height**2))**0.5))
    elif hypotenuse == str("x"):
        return ("Hypotenuse = " + str(((height**2) + (base**2))**0.5))

print(pythagoras(3,4,'x'))
print(pythagoras(3,'x',5))
print(pythagoras('x',4,5))

```

Hypotenuse = 5.0  
base= 4.0  
height = 3.0

In [23]:

```

# 15- Write a python program to print the frequency of each of the characters present in a
str_1='fliprobointernship29isstarted'
freq={}
for val in str_1:
    freq[val]=freq.get(val,0)+1

print('frequency of all character presen in fliprobointernship29started: \n\n',str(freq))

```

frequency of all character presen in fliprobointernship29started:

```
{'f': 1, 'l': 1, 'i': 4, 'p': 2, 'r': 3, 'o': 2, 'b': 1, 'n': 2, 't': 3, 'e': 2, 's': 3, 'h': 1, '2': 1, '9': 1, 'a': 1, 'd': 1}
```

In [ ]: