

Operators

```
In [41]: Q.=1
x = 5
y = 2
r = x % y
print ('Remainder is:' , r)
```

Remainder is: 1

```
In [34]: # Q.2
a = 2
b = 3
print(2//3)
```

0

```
In [36]: # Q.3
a = 6
b = 2
print(6<<2)
```

24

```
In [37]: #Q.4 = Answer
a = 6
b = 2
print(6&2)
```

2

```
In [38]: # Q.5
a = 6
b = 2
print(6|2)
```

6

Variables

```
In [43]: # Q.10
_abc = "hello world"
print(_abc)
```

hello world
Hello world

```
In [44]: # Q.10
abc1 = "Hello world"
print(abc1)
```

Hello world

```
In [45]: # Q.10
1abc = "Hello world"
print(1abc)
```

Input In [45]
1abc = "Hello world"
^

python program to find the factorial of a number.

```
In [6]: if __name__ == '__main__':
        print("Enter the Number")
        number = int(input())
        factorial = 1

        if(number<0):
            print("Error: Factorial of a negative number is not difind")

        elif(number == 0):
            print(1)

        else:
            for i in range(1,number + 1):
                factorial = factorial*i

        print(factorial)
```

```
Enter the Number
5
120
```

Python program to find a number is prime or composite.

```
In [2]: n= int(input("Enter any number:"))
        if(n ==0 or n == 1):
            printf(n,"Number is neither prime nor composite")
        elif n>1 :
            for i in range(1,n):
                if(n%i == 0):
                    print(n,"is not prime but composite number")
                    break
            else:
                print(n,"number is prime but not composite number")
        else :
            print("Please enter positive number only ")
```

```
Enter any number:11
11 is not prime but composite number
```

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

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

        s = input("Enter the name ")
        ans = isPalindrome(s)

        if ans:
            print("It is palindrome ")
        else:
            print("It is not palidrome ")
```

Enter the name dad
It is palindrome

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

```
In [17]: 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!"

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

Hypotenuse = 5.0
Adjacent = 4.0
Opposite = 3.0
You know the answer!
```

program to print the frequency of each of the characters present in a given string.

```
In [22]: string=input("Enter the string: ")
char=input("Please enter the char to find frequency of ta character\n")
count=0
i=0
while(i<len(string)):
    if(string[i]==char):
        count=count+1
    i=i+1
print("The frequency of the ",char,"in the string is: ",count)

Enter the string: Hello world
Please enter the char to find frequency of ta character
l
The frequency of the  l in the string is:  3
```