PYTHON PROJECT

"""Q11 to Q15 are programming questions. Answer them in Jupyter Notebook.

11. Write a python program to find the factorial of a number.
12. Write a python program to find whether a number is prime or composite.
13. Write a python program to check whether a given string is palindrome or not.
14. Write a Python program to get the third side of right-angled triangle from two given sides.
15. Write a python program to print the frequency of each of the characters present in a given string"""

In [27]:

```python
# Q11 Writing a python program to find the factorial of a number.

num = int(input("Enter any Value: "))

factorial= 1

if num < 0:
    print("No Factorail for Neagtive numbers")
elif 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 any Value: 7
The factorial of 7 is 5040
```

In [29]:

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

num = int(input("Enter any Value :"))

if num > 1:
    for i in range (2, num):
        if (num % i) ==0:
            print(num, "It is Not a Prime Number ")
            break
    else:
        print(num, "It is a Prime Number")
elif num== 0 or 1:
    print(num,"Neither Prime nor Composite")
else:
    print(num,"It is composite")
```

```
Enter any Value :65
65 It is Not a Prime Number
```

In [37]:

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

def palindrome(s):
    return s==s[::-1]

s=input("enter any value:")
result = palindrome(s)

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

```
enter any value:level
Yes
```

In [44]:

```python
#14 Writing a Python program to get the third side of right-angled triangle from two given sides.
 #sqrt(Hypotenuse) = sqrt(perpendicula)+ sqrt(Base)---- Pythagoras theorem

def pythagoras(perpendicular,Base,hypotenuse):

        if perpendicular == str("x"):

            return ("perpendicualr = " + str(((hypotenuse**2) - (Base**2))))

        elif Base == str("x"):

            return ("Base = " + str(((hypotenuse**2) - (perpendicular**2))))

        elif hypotenuse == str("x"):

            return ("Hypotenuse = " + str(((perpendicular**2) + (Base**2))))

print(pythagoras(2,3,"x"))
```

```
Hypotenuse = 13
```

In [48]:

```python
#Q15Writing a python program to print the frequency of each of the characters present in a given string.

string = "ILOVEMYINDIA"

print("Given string", string)

#using Counter res = {}

res={n: string.count(n) for n in set (string)}

#result

print("frequency of each character :\n",res)
```

```
Given string ILOVEMYINDIA
frequency of each character :
 {'O': 1, 'V': 1, 'E': 1, 'D': 1, 'Y': 1, 'N': 1, 'I': 3, 'L': 1, 'A': 1, 'M': 1}
```

In [ ]: