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In [1]: # 11 Write a python program to find the factorial of a number

import math

def factorial(n):
    return(math.factorial(n))

num=6
print("Factorial of", num, "is",
      factorial(num))
```

Factorial of 6 is 720

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In [2]: # 12 Write a python program to find whether a number is prime or composite.

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(2,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:5  
5 number is prime but not composite number

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In [5]: #13 Write a python program to check whether a given string is palindrome or not.

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

s = "English"
ans = isPalindrome(s)

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

No

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In [6]: # 14 Write a Python program to get the third side of right-angled triangle from two given sides.

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 "Done!"

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  
Done!

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In [8]: #15 Write a python program to print the frequency of each of the characters present in a given string

_str = "PythonProgramming"

all_freq = {}

for i in _str:
    if i in all_freq:
        all_freq[i] += 1
    else:
        all_freq[i] = 1

print("Count of all characters in PythonProgramming is :\n "
      + str(all_freq))
```

Count of all characters in PythonProgramming is :  
{'P': 2, 'y': 1, 't': 1, 'h': 1, 'o': 2, 'n': 2, 'r': 2, 'g': 2, 'a': 1, 'm': 2, 'i': 1}

In [ ]: