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In [1]: #write a python program to find the factorial of a number
num = int(input("Enter any number : "))
factorial = 1
if num < 0:
    print("Oops!!!, factorial does not exist for negative numbers...please try any positive number")
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 number : 4  
The factorial of 4 is 24

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In [5]: #write a python program to find wheather the 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")
            print(i,"times",num//i,"is",num)
            break
    else:
        print(num,"is a prime number")

else:
    print(num,"is not a composite number")
```

Enter any number : 43  
43 is a prime number

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In [3]: #write a python program to check wheather the given string is palindrome or not
my_str = input("Enter a string : ")

my_str = my_str.casefold()

rev_str = reversed(my_str)

if list(my_str) == list(rev_str):
    print("Wow!!! This string is a palindrome...You have given the correct one")
else:
    print("Oops!!!your string is not a palindrome...Try another")
```

Enter a string : radar  
Wow!!! This string is a palindrome...You have given the correct one

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In [23]: #Write a Python program to get the third side of right-angled triangle from two given sides
def findHypotenuse(sidel, side2):

    h = (((sidel * sidel) + (side2 * side2))**(1/2));
    return h;

sidel = 8;
side2 = 9;

print(findHypotenuse(sidel, side2));
```

12.041594578792296

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In [28]: #Write a python program to print the frequency of each of the characters present in a given string.
test_str = input("Enter a string : ")

res = {}

for keys in test_str:
    res[keys] = res.get(keys, 0) + 1

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

Enter a string : dfghjkhghgdfghjklkjghh  
Count of all characters in test\_str is :  
{ 'd': 2, 'f': 3, 'g': 4, 'h': 5, 'j': 4, 'k': 3, 'l': 1}

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