

```
In [5]: # 11. Write a python program to find the factorial of a number.

num = 7

#num = int(input("Enter a number: "))

factorial = 1

# check if the number is negative, positive or zero
if num < 0:
    print("Sorry, factorial does not exist for negative 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)
```

The factorial of 7 is 5040

```
In [1]: #12. Write a python program to find whether a 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 NOT a prime number")
            break
    else:
        print(num, "is a PRIME number")
elif num == 0 or 1:
    print(num, "is a neither prime NOR composite number")
else:
    print(num, "is NOT a prime number it is a COMPOSITE number")
```

Enter any number : 5
5 is a PRIME number

```
In [8]: #13. Write a python program to check whether a given string is palindrome or not.

my_str = 'aIbohPhoBiA'

my_str = my_str.casefold()

rev_str = reversed(my_str)

if list(my_str) == list(rev_str):
    print("The string is a palindrome.")
else:
    print("The string is not a palindrome.")
```

The string is a palindrome.

```
In [12]: #14. Write a Python program to get the third side of right-angled triangle from two given sides.
a = float(input("Enter base: "))
b = float(input("Enter height: "))
x = float(input("Enter angle: "))

c = math.sqrt(a ** 2 + b ** 2)

print("Hypotenuse =", c)
```

Enter base: 5
Enter height: 8
Enter angle: 90
Hypotenuse = 9.433981132056603

```
In [43]: #15. Write a python program to print the frequency of each of the characters present in a given string
str_text = "Neha Chand Deopa"
freq_count = {}

for i in str_text:
    if i in freq_count:
        freq_count[i] += 1
    else:
        freq_count[i] = 1
print ("Count of all characters in "+str_text+" is :\n "
      + str(freq_count))
```

Count of all characters in Neha Chand Deopa is :
{ 'N': 1, 'e': 2, 'h': 2, 'a': 3, ' ': 2, 'C': 1, 'n': 1, 'd': 1, 'D': 1, 'o': 1, 'p': 1 }

```
In [ ]:
```