

```
# program to find the factorial of a number

num=int(input("Enter the number: "))

factorial=1

if num < 0:

    print("Factorial doesn't work for negative number")

elif num == 0:

    print("Factorial for 0 is 1")

else:

    for i in range(1,num+1):

        factorial=factorial*i

    print ("The factorial of",num,"is",factorial)
```

```
#program to find whether a number is prime or composite

num=int(input("Enter the number :"))

if(num==0 or num==1):

    print (num,"Number is neither prime nor composite")

elif num>1:

    for i in range(2,int(num)+1):

        if(num%i==0):

            print(num,"is not prime but composite number")

            break

        else:

            print(num,"is prime but not composite number")

            break

else:

    print("Enter the positive number")
```

#program to check whether a given string is palindrome or not

```
n=input("Enter the string: ")
```

```
n=n.casefold()
```

```
rev_n=reversed(n)
```

```
if (list(n)==list(rev_n)):
```

```
    print("Yes, its a palindrome")
```

```
else:
```

```
    print("No, its not a palindrome")
```

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

```
import math
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```
b=float(input("Enter the base of the triangle: "))
```

```
h=float(input("Enter the height of the triangle: "))
```

```
a=float(input("Enter the angle: "))
```

```
c=math.sqrt((b**2)+(h**2))
```

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

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

```
str=input("Enter the string: ")
```

```
dict={}
```

```
for i in str:
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```
    if i in dict:
```

```
        dict[i]+=1
```

```
    else:
```

```
        dict[i]=1
```

```
print(dict)
```