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In [1]: # program to find factorial of a number
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In [12]: def factorial(number):  
    fact=1  
    for i in range(1,number+1):  
        fact=fact*i  
    return fact  
number=int(input("Enter the number"))  
results=factorial(number)  
print('The factorial of %d = %d'%(number,results))
```

```
Enter the number5  
The factorial of 5 = 120
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In [13]: # program to find whether a number is prime or composite
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In [23]: n=int(input('enter the number'))  
if(n==0 or n==1):  
    print(n,'number is neighter prime or composite')  
elif n>1:  
    for i in range(2,n):  
        if(n%i==0):  
            print(n,"number is not prime but composite ")  
            break  
    else:  
        print(n,'number is prime but not composite ')  
else:  
    print('please enter the positive number ')
```

```
enter the number88  
88 number is not prime but composite
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In [24]: # program to find whether the sting is palindrome or not
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In [39]: name=input('enter the string value')  
name1=""  
for i in name:  
    name1=i+name1  
if (name==name1):  
    print('given string is palindrome')  
else:  
    print('given string is not palindrome')
```

```
enter the string valueaaa  
given string is palindrome
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In [40]: # program to find the hypotenuse of triangle
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In [46]: from math import sqrt  
first_side=float(input('enter the first side value of right angle triangle '))  
second_side=float(input('enter the second side value of right angle triangle '))  
hypotenuse=sqrt(first_side**2 + second_side**2)  
print('lenght of the hypotenuse value is',hypotenuse)
```

```
enter the first side value of right angle triangle 16  
enter the second side value of right angle triangle 16  
lenght of the hypotenuse value is 22.627416997969522
```

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In [47]: # program to find the frequency of each of the charecters present in a given sting
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```
In [57]: string_value=input('enter the string')  
d=dict()  
for i in string_value:  
    if i in d:  
        d[i]=d[i]+1  
    else:  
        d[i]=1  
print("frequency of each charecter present in a given string = ",d)
```

```
enter the stringhemanth  
frequency of each charecter present in a given string = {'h': 2, 'e': 1, 'm': 1, 'a': 1, 'n': 1, 't': 1}
```

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In [ ]:
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