

### **Factorial**

```
def Factorial(num):
    if num < 0:
        return 0
    elif num == 0 or num == 1:
        return 1
    else:
        fact = 1
        while num > 1:
            fact *= num
            num -= 1
        return fact

num = int(input("Enter the value: "))
print("Factorial of",num,"is",Factorial(num))
```

### **Armstrong**

```
num = int(input("Enter a value: "))
num_val = str(num)
num_len = len(num_val)

sum = 0
for i in num_val:
    sum += int(i) ** num_len
if sum == num:
    print(num," is Armstrong value")
else:
    print(num," is not Armstrong value")
```

### **Reverse String**

```
def ReverseString(str):
    str = str[::-1]
    return str

str = "geeksforgeeks"
print(ReverseString(str))
```

### **Sorting**

```
def AscendingSort(val):  
    val.sort(reverse=True)  
    return val  
  
val = []  
n = int(input("Enter the number of elements : "))  
  
for i in range(0, n):  
    ele = int(input())  
    val.append(ele)  
  
print(val)  
print(AscendingSort(val))
```

### **Prime Number**

```
val = int(input("Enter a value: "))  
if val > 1:  
    for i in range(2, val):  
        if(val % i) == 0:  
            print(val," is not a prime number")  
            break  
    else:  
        print(val," is a prime number")  
else:  
    print(val," is a prime number")
```

### **Palindrome**

```
val = []  
val = input("Enter the string: ")  
if val == val[::-1]:  
    print(val,"is a Palindrome")  
else:  
    print(val,"is not a palindrome")
```

### **Fibonacci**

```
def isFibonacci(n):
    if n < 0:
        print("Incorrect Input")
    elif n == 0:
        return 0
    elif n == 1 or n == 2:
        return 1
    else:
        return isFibonacci(n-1) + isFibonacci(n-2)
```

```
n = int(input("Enter the value: "))
print(isFibonacci(n))
```

### **Character to ASCII**

```
val = input("Enter the character: ")
print("ASCII value of "+val+" is", ord(val))
```

### **Count Character**

```
val = input("Enter the string: ")
freq_str = {}
```

```
for i in val:
    if i in freq_str:
        freq_str[i] += 1
    else:
        freq_str[i] = 1
```

```
print(str(freq_str))
```

### **Finding Substring**

```
def isSubstr(str1, str2):
    if (str1.count(str2) > 0):
        print("Yes")
    else:
        print("No")
```

```
str1 = input("Enter the first string: ")
str2 = input("Enter a second string: ")
isSubstr(str1, str2)
```