**Write a function that computes the factorial of a number.**

**The function should take the number as a parameter and return the factorial value.**

def factorial(n):  
 if n == 0:  
 return 1  
 else:  
 return n \* factorial(n-1)  
n=int(input("Input a number to compute the factiorial : "))  
print(factorial(n))

**Write a function that computes the sum of all digits.**

**Pass the number as a parameter and return the computed sum.**

def sum\_of\_digit( n ):  
 if n == 0:  
 return 0  
 return (n % 10 + sum\_of\_digit(int(n / 10)))  
  
num = int(input('Enter digits:'))  
result = sum\_of\_digit(num)  
print("Sum of digits in",num,"is", result)

**Write a function that checks if a number is prime or not.**

**Pass the number as a parameter and return True if the number is prime, otherwise return False.**

def test\_prime(n):  
 if (n==1):  
 return False  
 elif (n==2):  
 return True;  
 else:  
 for x in range(2,n):  
 if(n % x==0):  
 return False  
 return True  
a = int(input("Enter a number: "))  
print(test\_prime(a))

**Write a function that prints the table of a number.**

**Pass the number as a parameter to the function.**

def table(n):  
 for i in range (1, 11):  
 print ("%d \* %d = %d" % (n, i, n \* i))  
n = int(input("Enter number:"))  
table(n)

**Write a function that computes the simple interest.**

**Pass the principal amount, the rate and the time as parameters to the function.**

def temp(p,t,r):  
  
 SI =(p\*t\*r)/100  
 print("Simple Interest is:",SI)  
 return SI;  
  
temp(p = int(input("Enter Principle:")), t = int(input("Enter Time:")),r = int(input("Enter Rate:")))

**Write a function that converts Celsius reading to Fahrenheit reading. Read the Celsius value from the user in the function and also print the Fahrenheit reading in the function itself.**

def temp(c):  
  
 f =(c\*1.8)+32  
 print("Temperature in farenheit is:",f)  
 return f;  
  
temp(c = int(input("Enter celcius:")))

**Design a function having no parameters and no return statement**

def print\_lyrics():  
 print ("I'm a lumberjack, and I'm okay.")  
 print ('I sleep all night and I work all day.')  
def repeat\_lyrics():  
 print\_lyrics()  
 print\_lyrics()  
repeat\_lyrics()

**Design a function having parameters and no return statement**

def Hello(name="everybody"):  
 """ Greets a person """  
 print("Hello " + name + "!")  
  
Hello("Peter")  
Hello()

**Design a function having no parameters but a return statement**

def num\_digits():  
 number = 4203  
 count = 0  
  
 while number != 0:  
 count += 1  
 number //= 10  
  
 return count  
  
print(num\_digits())

**Design a function having both parameters and return statement**

def num\_digits(number):  
 count = 0  
  
 while number != 0:  
 count += 1  
 number //= 10  
  
 return count  
  
print(num\_digits(4203))