```
def function_name(parameters):
  #statement
  return expression
```

```
def add(num1: int, num2: int) -> int:
  num3 = num1 + num2

  return num3

a = int(input())
b = int(input())
print(add(a,b))
  #print(f"The addition of {num1} and {num2} results {ans}.")
```

```
5
10
15
```

```
def default(x, y=50):
  print("x: ", x)
  print("y: ", y)

  default(20)
```

Types of python function arguments

1.Default argument 2.Keyword arguments(named arguments) 3.Positional arguments 4.Arbitrary arguments

```
def myFun(*argv):
  for arg in argv:
    print(arg)
```

```
def myFun(*argv):
  for arg in argv:
    print(arg)

    myFun('Hello', 'Welcome', 'to', 'World')
```

```
def myFun(**kwargs):
  for key, value in kwargs,item():
    print("%s == %s" % (key, value))

    myFun(first='Geeks', mid='for', last='Geeks')
```

```
def my_function(food):
  for x in food:
    print(x)

    fruits = ["apple", "banana", "cherry"]

    my_function(fruits)
```

```
def factorial(n):

  if n==1:

    return 1

else:

          return n * factorial(n-1)

   print(factorial(5))
```

```
  File "<tokenize>", line 11
    print(factorial(5))
    ^
IndentationError: unindent does not match any outer indentation level
```

Next steps: Explain error

Start coding or generate with AI.

```
def monitor_temperature():
    # Get the upper and lower temperature limits from the user
    lower_limit = float(input("Enter the lower temperature limit (°C): "))
    upper_limit = float(input("Enter the upper temperature limit (°C): "))

    # Ask the user to input a temperature to check
    temperature = float(input("Enter the current temperature (°C): "))

    # Display the current temperature and alert
    print(f"Current Temperature: {temperature:.2f}°C")

    if temperature < lower_limit:
        print("ALERT: Temperature is too LOW!")
    elif temperature > upper_limit:
        print("ALERT: Temperature is too HIGH!")
    else:
        print("Temperature is NORMAL.")

# Call the function
monitor_temperature()
```

```
Enter the lower temperature limit (°C): 56
Enter the upper temperature limit (°C): 89
Enter the current temperature (°C): 60
Current Temperature: 60.00°C
Temperature is NORMAL.
```

```
#Generating OTP for authentication

import random

def generate_otp(length=6):
  otp = ""
  for _ in range(length):
    otp += str(random.randint(0,9))
    return otp

    print("Your OTP is:", generate_otp())
```