**. Basic Function Definition:** Write a function sum\_of\_squares that takes two numbers as input and returns the sum of their squares.

**Function with Default Arguments:** Write a function greet that takes a name and a greeting message with a default value of "Hello". If no greeting is provided, use the default.

**Function with Variable-Length Arguments:** Write a function find\_max that takes an arbitrary number of arguments and returns the maximum value.

**Lambda for Basic Arithmetic:** Create a lambda function that multiplies two numbers and use it to multiply 4 and 5.

**Lambda with** map**:** Use a lambda function with map to square each number in a list.

**Lambda with** filter**:** Use a lambda function with filter to get all even numbers from a list.

**. Simple Generator:** Write a generator function count\_down that takes a starting number and counts down to zero.

**Fibonacci Generator:** Write a generator function fibonacci that generates the Fibonacci sequence up to n terms.

**Access Control Decorator:** Write a decorator requires\_permission that checks if a user has the necessary permission to execute a function.