Python Task Repository

This repository contains two Python programs that demonstrate basic function definitions, use of recursion, and working with the `math` module.

Task 1: Calculate Factorial Using a Function

Description

This Python script defines a function named `factorial` that takes a number as an argument and calculates its factorial.

How it works

- Defines the `factorial` function, which uses either a loop or recursion to calculate the factorial of a number
- Calls the function with a sample number and prints the result

Example Output:

- Input: `5`
  - Output: `120` (since `5! = 5 * 4 * 3 * 2 * 1 = 120`)

Task 2: Using the Math Module for Calculations

Description

This Python script uses the `math` module to perform several mathematical calculations.

How it works

- Takes a number as input from the user
- Uses the `math` module to:
  - Calculate the **square root** of the number
  - Calculate the **natural logarithm** (log base e) of the number
  - Calculate the **sine** of the number (assumed to be in radians)
- Displays the results of these calculations

Example Output:

- Input: `9`
  - Output:
    - Square Root: `3.0`
    - Natural Logarithm: `2.1972245773362196`
    - Sine: `0.1411200080598672`

Both scripts are written in Python and can be