### ****Factorial Calculator Documentation****

## ****1. Overview****

The Factorial Calculator App is an interactive and responsive web application that computes the factorial of any positive integer entered by the user. With a simple and user-friendly interface, users can select between **Iterative** or **Recursive** methods for the calculation, and the app provides step-by-step results with animations.

## ****2. Features****

* **Input Validation:** Ensures only valid positive integers are accepted.
* **Two Calculation Methods:**
  + **Iterative:** Uses a loop to calculate the factorial.
  + **Recursive:** Uses a recursive function to calculate the factorial.
* **Error Messages:** Alerts users when invalid input is detected.
* **Step-by-Step Visualization:** Displays each step of the calculation in real-time.
* **Responsive Design:** Works seamlessly on all devices (desktops, tablets, and mobiles).

## ****3. Setup****

### ****3.1 Prerequisites****

* A browser (Chrome, Firefox, Edge, etc.) is required to run the app locally.

### ****3.2 Steps to Run****

**Download the Files:**

* + Save the provided task-1.html in the folder.

**Open the App:**

* + Open the task-1.html file in your browser by double-clicking it.

**Start Using the App:**

* + Enter a positive integer in the input field.
  + Choose a calculation method (Iterative or Recursive).
  + Click the "Calculate" button to see the result.

## ****How to Use the App****

**Step 1: Open the App**

Open the `task-1.html` file in your web browser.

**Step 2: Enter a Number**

Input a positive integer (e.g., 5) in the provided text box.

**Step 3: Select a Calculation Method**

Choose between the **Iterative** or **Recursive** method by selecting the corresponding radio button.

**Step 4: Click Calculate**

Press the "Calculate Factorial Stepwise" button.

**Step 5: View the Results**

The app will display the step-by-step process for the chosen method and highlight the final result.

**Step 6: Error Handling**

If an invalid input is entered (e.g., -3, 0, 3.5, or empty), an error message will be displayed, asking the user to provide valid input.

## ****5. Technology Stack****

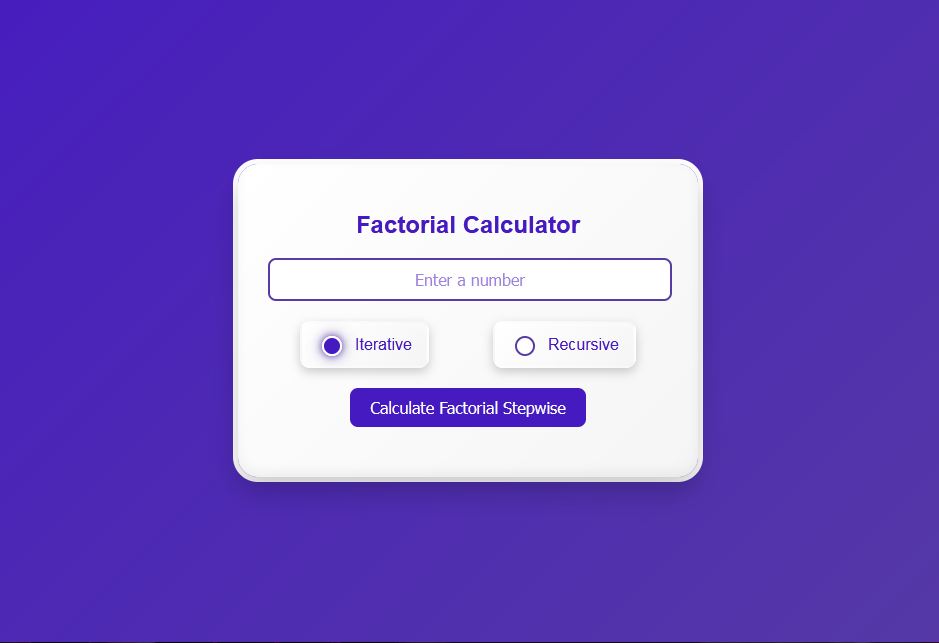
* **HTML:** For page structure.
* **CSS:** For styling and responsiveness.
* **JavaScript:** For factorial calculation logic and user interaction.

## ****6. Example Usage****

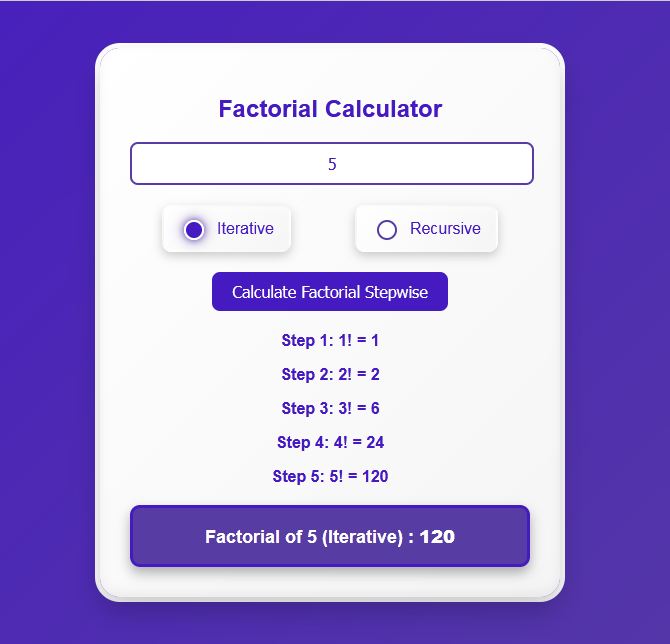
* **Input:**5
* **Selected Method:** Recursive
* **Output:**

Factorial of 5 (Recursive) : 120

1. **Sample Images**



Using Iterative method :



Using Recursive method :

