Simon Game

Purpose: A memory game using 4 LEDs, 4 buttons, and a speaker. The player repeats a growing sequence of lights.

Main Features:

- **LEDs & Buttons**: Represent different colors or steps in the sequence.

- **Buzzer**: Plays tones for feedback.

- **Difficulty Selection**: User chooses how fast the sequence is shown.

- **Sequence Generation**: Randomly adds a new step each round.

- **Player Input**: Player has 5 seconds to repeat the sequence.

- **Game Over**: Triggered by a wrong input or timeout, with light & sound alerts.

- Uses millis() for **non-blocking timeout**.

- Clean **modular functions** (showSequence(), getUserInput(), etc.).