

Objective

Design and implement a **Number Guessing Game** in Python using **Object-Oriented Programming (OOP)** principles and **NumPy's random number generation**.

The game randomly generates a secret number, and the player must guess it within a limited number of attempts based on the selected difficulty level.

Difficulty Levels

Easy Mode

- Random number range: **1 to 100**
- Maximum attempts allowed: **6**

Hard Mode

- Random number range: **1 to 1000**
 - Maximum attempts allowed: **9**
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Functional Requirements

1. The program must use **NumPy (numpy.random)** to generate the random number.
2. The game logic must be implemented using **OOP concepts**:
 - Create a **class** (e.g., `GuessingGame`)
 - Use **instance variables** to store:
 - secret number
 - number of attempts
 - difficulty level
 - Use **methods** to:
 - start the game
 - accept user guesses

- validate guesses
 - display hints and results
3. The player should be prompted to choose a **difficulty level** (Easy or Hard).
 4. After each guess:
 - Display “**Too High**”, “**Too Low**”, or “**Correct Guess**”.
 5. The game should end when:
 - The player guesses the number correctly, **OR**
 - The player exhausts all allowed attempts.
 6. At the end of the game, display:
 - The correct number
 - Whether the player **won or lost**
 - Total attempts used