**MINI PROJECT**

**GUESSING GAME**

**ALGORITHM:**

1. **User Input for Range:**

Prompt the user to enter the lower bound (X) and the upper bound (Y) of the range.

1. **Generate Random Number:**

Use a random number generator to select a number within the range [X, Y].

1. **User Guesses:**

* Prompt the user to guess the number.
* If the guess is lower than the random number, inform the user.
* If the guess is higher than the random number, inform the user.
* If the guess is correct, congratulate the user and end the game.

1. **Count Guesses:**

Keep track of the number of guesses the user makes.

1. **End Game:**

Once the user guesses the correct number, display the number of guesses it took.

**PSEUDO CODE:**

Start

Prompt user for lower bound (X)

Prompt user for upper bound (Y)

Generate a random number between X and Y (inclusive)

Initialize guess count to 0

Repeat until user guesses correctly:

Prompt user to guess the number

Increment guess count

If guess is lower than random number:

Print “Too low”

Else if guess is higher than random number:

Print “ Too high”

Else:

Print “Congratulations! You guessed the number in {guess count} tries”

End

**ANALYSIS OF PROBLEM:**

Create an interactive number guessing game where the system generates a random number within a user-defined range, and the user attempts to guess the number in as few tries as possible.

**Key Points:**

1. **User Input:** Handling inputs for the range and guesses.
2. **Random Number Generation:** Utilizing Python’s random.randint function.
3. **Feedback Mechanism:** Providing feedback on each guess to guide the user.
4. **Loop and Conditionals:** Using a loop to allow multiple guesses ans conditionals to compare guesses with the target number.
5. **Count Tracking:** Keeping track of the number of guesses.