Title: Guessing Game
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Date: October 22
Course & Section: CSC 109-101W

Description: Generates a random number between 1 and 100. Then asks the user to enter a guess. If the guess is lower or greater than the random number, then it tells the user if it's higher or lower. The game ends when the user enters a correct guess or inputs 10 incorrect guesses. Then asks the user to play again.

Initial Algorithm:

1. Generate a random number
2. Prompt for a guess
3. Error check the guess
4. Determine whether the guess is lower, higher, or equal to the random number
5. Display a message based on the comparison of the guess with the random number
6. Loop until the guess is correct or 10 guesses were used
7. Display a message if the 10 guesses were used
8. Prompt for whether to play again
9. Loop to the start if the user enters 1

Data Requirements:

Input:

- Guess
- Play Again

Output: None

Additional Data:

- Guesses
- Random Number

Formulas:

- Guesses = Guesses + 1

Refined Algorithm:

1. Initialize Guesses to 0
2. Initialize Play Again to 1
3. DO
    1. Generate a Random Number between 1 and 100 (inclusive)
    2. DO

1. Prompt for a Guess
2. IF Guess > 100 OR Guess < 1 THEN
    1. Display " You didn't enter a correct guess!"
3. ELSE
    1. IF Guess < Random Number THEN
        1. Display "That guess is too low!"
        2. Increment Guesses by 1
            - Guesses = Guesses + 1
    2. ELSE IF Guess > Random Number THEN
        1. Display "That guess is too high!"
        2. Increment Guesses by 1
            - Guesses = Guesses + 1
    3. ELSE
        1. Display "Congradulations! You guessed correctly!"
    4. END IF
4. END IF

3. WHILE Guess <> Random Number and Guesses < 10
4. IF Guesses >= 10 THEN
    1. Display "Sorry, you used your 10 guesses!"
5. END IF
6. Reset Guesses to 0
7. Prompt whether to Play Again (1 for yes and 0 for no)

4. WHILE Play Again is 1