import java.util.Scanner;

import java.util.Random;

public class NumberGuessingGame{

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

Random random = new Random();

boolean playAgain;

int score = 0;

int highScore = 0;

do {

int targetNumber = random.nextInt(100) + 1;

int attempts = 0;

boolean guessedCorrectly = false;

int maxAttempts = 15;

System.out.println("\nGuess the number (between 1 and 100). You have " + maxAttempts + " attempts.");

while (attempts < maxAttempts && !guessedCorrectly) {

System.out.print("Enter your guess: ");

while (!scanner.hasNextInt()) {

System.out.print("Invalid input. Please enter a number between 1 and 100: ");

scanner.next();

}

int guess = scanner.nextInt();

attempts++;

if (guess == targetNumber) {

guessedCorrectly = true;

score++;

highScore = Math.max(score, highScore);

System.out.println("Congratulations! You guessed the correct number in " + attempts + " attempts.");

} else if (guess < targetNumber) {

System.out.println("Too low! Try again.");

} else {

System.out.println("Too high! Try again.");

}

}

if (!guessedCorrectly) {

System.out.println("Sorry, you've used all attempts. The correct number was " + targetNumber + ".");

}

System.out.println("Your current score: " + score);

System.out.println("Your highest score: " + highScore);

System.out.print("Do you want to play again? (yes/no): ");

scanner.nextLine();

playAgain = scanner.nextLine().equalsIgnoreCase("yes");

} while (playAgain);

System.out.println("Thank you for playing! Your final score is: " + score);

System.out.println("Your highest score was: " + highScore);

scanner.close();

}

}