START

DISPLAY "Enter the lower bound:"

INPUT lowerBound

DISPLAY "Enter the upper bound:"

INPUT upperBound

WHILE lowerBound >= upperBound DO

DISPLAY "Error: Lower bound must be less than upper bound."

DISPLAY "Enter the lower bound:"

INPUT lowerBound

DISPLAY "Enter the upper bound:"

INPUT upperBound

ENDWHILE

SET randomNumber = RANDOM(lowerBound, upperBound)

SET guessedCorrectly = FALSE

WHILE guessedCorrectly == FALSE DO

DISPLAY "Guess a number between " + lowerBound + " and " + upperBound + ":"

INPUT guess

IF guess < lowerBound OR guess > upperBound THEN

DISPLAY "Invalid guess. Enter a number between " + lowerBound + " and " + upperBound

ELSEIF guess < randomNumber THEN

DISPLAY "Too low! Try again."

ELSEIF guess > randomNumber THEN

DISPLAY "Too high! Try again."

ELSE

DISPLAY "Congratulations! You guessed the correct number."

SET guessedCorrectly = TRUE

ENDIF

ENDWHILE

END