Program 2 Java Due: October 11, 2005

Write a Java program that allows the user to play a number guessing game with the program. Your program will generate a random number between 0 and 100 inclusive. The user does not know the value of this number and she must guess the value while the program runs in a loop. After each guess report to the user if the guess was "too high", "too low", or "correct". After the user has guessed the correct value print out the number of guesses it took to get the number and then ask to user if they want to play again.

Use the value "No" or "no" to indicate a sentinel value to quit the loop and end the program. The additional feature to add is to calculate the average of how many attempts it took to guess the correct number for all games played from start until the "No" is entered. In other words let's assume that the following 3 games were played and the user's guesses were followed by the programs responses:

Computer's Random Number	**My Guess**	**Output**
17		Enter a value!
	20	Too high
	16	Too low
	17	Correct, 3 guesses
		Continue ?
	Y	
63		Enter a value!
	47	Too low
	72	Too high
	64	Too high
	62	Too low
	63	Correct, 5 guesses
		Continue ?
	Y	
37		Enter a value!
	52	Too high
	37	Correct, 2 guesses
		Continue ?
	No	
		Average = 3.33 guesses, in 3 games
		Good Bye!

Turn in your program according to the submission guidelines. **Include an answer to the following question on a separate document (Word file is OK).** "What guessing strategy will give you the best chance in guessing the correct number in the least number of attempts?"
The computer's number is randomly created between 1 and 100. Try this strategy versus other ones and see which ones give you the minimal number of guesses on the average. Can you get close to six on the average?