

System Test Plan: Guessing Game program

You will provide an integer value to be used as a seed for the random generator when testing. Below are the secret code digits for several different seeds that you can use in your tests.

Seed: 1 Secret Code: 5 8 7 3
Seed: 5 Secret Code: 7 2 4 4
Seed: 22 Secret Code: 2 0 2 1
Seed: 55 Secret Code: 5 9 9 9

NOTE: You can stop program execution by pressing Ctrl+C.

Test ID	Description	Expected Results	Actual Results
testTooManyCommandLineArguments Author: Dr. Balik	\$ java -cp bin GuessingGame abc 123	Usage: java -cp bin GuessingGame <seed> <Program exits>	Usage: java -cp bin GuessingGame <seed> <Program exits>
testNonintegerCommandLineArgument Author: Dr. Balik	\$ java -cp bin GuessingGame abc	Usage: java -cp bin GuessingGame <seed> <Program exits>	Usage: java -cp bin GuessingGame <seed> <Program exits>
testNonintegerGuess Author: Dr. Balik	\$ java -cp bin GuessingGame 1 <<Header>> Guess 4 digits (e.g., 2 8 5 8): 7 8 xy9	Invalid guess Guess 4 digits (e.g., 2 8 5 8):	Invalid guess Guess 4 digits (e.g., 2 8 5 8):
testInvalidIntegerGuess Author: Dr. Balik	\$ java -cp bin GuessingGame 1 <<Header>> Guess 4 digits (e.g., 2 8 5 8): 9 12 08	Invalid guess Guess 4 digits (e.g., 2 8 5 8):	Invalid guess Guess 4 digits (e.g., 2 8 5 8):
testOneCorrectDigitInCorrectPlace	\$ java -cp bin GuessingGame 1 <<Header>>	Guess CD CP 8 6 4 1 1 0	Guess CD CP 8 6 4 1 1 0

Author: Dr. Balik	Guess 4 digits (e.g., 2 8 5 8): 8 6 4 1	Guess 4 digits (e.g., 2 8 5 8):	Guess 4 digits (e.g., 2 8 5 8):
Test ID	Description	Expected Results	Actual Results
testOneCorrectDigitCorrectPlace Author: Dr. Balik	<pre>\$ java -cp bin GuessingGame 1 <<Header>> Guess 4 digits (e.g., 2 8 5 8): 0 1 7 2</pre>	<pre>Guess CD CP 0 1 7 2 1 1 Guess 4 digits (e.g., 2 8 5 8):</pre>	<pre>Guess CD CP 0 1 7 2 1 1 Guess 4 digits (e.g., 2 8 5 8):</pre>
testWinAfter3Guesses Author: Dr. Balik	<pre>\$ java -cp bin GuessingGame 1 <<Header>> Guess 4 digits (e.g., 2 8 5 8): 8 5 3 7 Guess CD CP 8 5 3 7 4 0 Guess 4 digits (e.g., 2 8 5 8): 5 7 3 8 Guess CD CP 8 5 3 7 4 0 5 7 3 8 4 1 Guess 4 digits (e.g., 2 8 5 8): 5 8 7 3</pre>	<pre>Guess CD CP 8 5 3 7 4 0 5 7 3 8 4 1 5 8 7 3 4 4 You guessed correctly after 3 guess(es)!</pre>	<pre>Guess CD CP 8 5 3 7 4 0 5 7 3 8 4 1 5 8 7 3 4 4 You guessed correctly after 3 guess(es)!</pre>

Test ID	Description	Expected Results	Actual Results
testWinAfter10Guesses	<pre>\$ java -cp bin GuessingGame 55</pre>	<pre>Guess CD CP 2 0 2 1 0 0 5 8 7 3 1 1 1 2 3 4 0 0 1 2 3 4 0 0 5 5 5 5 1 1 6 6 6 6 0 0 7 7 7 7 0 0 8 8 8 8 0 0 9 9 9 9 3 3 5 9 9 9 4 4</pre>	<pre>Guess CD CP 2 0 2 1 0 0 5 8 7 3 1 1 1 2 3 4 0 0 1 2 3 4 0 0 5 5 5 5 1 1 6 6 6 6 0 0 7 7 7 7 0 0 8 8 8 8 0 0 9 9 9 9 3 3 5 9 9 9 4 4</pre>
Author: Benjamin Uy	<pre><<Header>> Guess 4 digits (e.g., 2 8 5 8): 2 0 2 1 Guess CD CP 2 0 2 1 0 0 Guess 4 digits (e.g., 2 8 5 8): 5 8 7 3 Guess CD CP 2 0 2 1 0 0 5 8 7 3 1 1 Guess 4 digits (e.g., 2 8 5 8): 1 2 3 4 Guess CD CP 2 0 2 1 0 0 5 8 7 3 1 1 1 2 3 4 0 0 Guess 4 digits (e.g., 2 8 5 8): 1 2 3 4 Guess CD CP 2 0 2 1 0 0 5 8 7 3 1 1 1 2 3 4 0 0 1 2 3 4 0 0 Guess 4 digits (e.g., 2 8 5 8): 5 5 5 5 Guess CD CP 2 0 2 1 0 0 5 8 7 3 1 1</pre>	<pre>You guessed correctly after 10 guess(es) !</pre>	<pre>You guessed correctly after 10 guess(es) !</pre>

	<div>1 2 3 4 0 0</div> <div>1 2 3 4 0 0</div> <div>5 5 5 5 1 1</div> <div>Guess 4 digits (e.g., 2 8 5 8): 6 6 6 6</div> <div><div>Guess CD CP</div><div>2 0 2 1 0 0</div><div>5 8 7 3 1 1</div><div>1 2 3 4 0 0</div><div>1 2 3 4 0 0</div><div>5 5 5 5 1 1</div><div>6 6 6 6 0 0</div></div> <div>Guess 4 digits (e.g., 2 8 5 8): 7 7 7 7</div> <div><div>Guess CD CP</div><div>2 0 2 1 0 0</div><div>5 8 7 3 1 1</div><div>1 2 3 4 0 0</div><div>1 2 3 4 0 0</div><div>5 5 5 5 1 1</div><div>6 6 6 6 0 0</div><div>7 7 7 7 0 0</div></div> <div>Guess 4 digits (e.g., 2 8 5 8): 8 8 8 8</div> <div><div>Guess CD CP</div><div>2 0 2 1 0 0</div><div>5 8 7 3 1 1</div><div>1 2 3 4 0 0</div><div>1 2 3 4 0 0</div><div>5 5 5 5 1 1</div><div>6 6 6 6 0 0</div><div>7 7 7 7 0 0</div><div>8 8 8 8 0 0</div></div> <div>Guess 4 digits (e.g., 2 8 5 8): 9 9 9 9</div> <div><div>Guess CD CP</div><div>2 0 2 1 0 0</div><div>5 8 7 3 1 1</div></div>		
--	--	--	--

	<div>1 2 3 4 0 0</div> <div>1 2 3 4 0 0</div> <div>5 5 5 5 1 1</div> <div>6 6 6 6 0 0</div> <div>7 7 7 7 0 0</div> <div>8 8 8 8 0 0</div> <div>9 9 9 9 3 3</div> <div>Guess 4 digits (e.g., 2 8 5 8): 5 9 9 9</div>		
<div>testNoWinAfterTenGuesses</div> <div>Author: Benjamin Uy</div>	<div>\$ java -cp bin GuessingGame 55</div> <div><<Header>></div> <div>Guess 4 digits (e.g., 2 8 5 8): 2 0 2 1</div> <div>Guess CD CP</div> <div>2 0 2 1 0 0</div> <div>Guess 4 digits (e.g., 2 8 5 8): 5 8 7 3</div> <div>Guess CD CP</div> <div>2 0 2 1 0 0</div> <div>5 8 7 3 1 1</div> <div>Guess 4 digits (e.g., 2 8 5 8): 1 2 3 4</div> <div>Guess CD CP</div> <div>2 0 2 1 0 0</div> <div>5 8 7 3 1 1</div> <div>1 2 3 4 0 0</div> <div>1 2 3 4 0 0</div> <div>Guess 4 digits (e.g., 2 8 5 8): 1 2 3 4</div> <div>Guess CD CP</div> <div>2 0 2 1 0 0</div> <div>5 8 7 3 1 1</div> <div>1 2 3 4 0 0</div> <div>1 2 3 4 0 0</div> <div>Guess 4 digits (e.g., 2 8 5 8): 5 5 5 5</div>	<div>Guess CD CP</div> <div>2 0 2 1 0 0</div> <div>5 8 7 3 1 1</div> <div>1 2 3 4 0 0</div> <div>1 2 3 4 0 0</div> <div>5 5 5 5 1 1</div> <div>6 6 6 6 0 0</div> <div>7 7 7 7 0 0</div> <div>8 8 8 8 0 0</div> <div>9 9 9 9 3 3</div> <div>5 5 9 9 3 3</div> <div>Sorry, no more guesses - the secret code is 5 9 9 9</div>	<div>Guess CD CP</div> <div>2 0 2 1 0 0</div> <div>5 8 7 3 1 1</div> <div>1 2 3 4 0 0</div> <div>1 2 3 4 0 0</div> <div>5 5 5 5 1 1</div> <div>6 6 6 6 0 0</div> <div>7 7 7 7 0 0</div> <div>8 8 8 8 0 0</div> <div>9 9 9 9 3 3</div> <div>5 5 9 9 3 3</div> <div>Sorry, no more guesses - the secret code is 5 9 9 9</div>

	<div>Guess CD CP</div> <div>2 0 2 1 0 0</div> <div>5 8 7 3 1 1</div> <div>1 2 3 4 0 0</div> <div>1 2 3 4 0 0</div> <div>5 5 5 5 1 1</div> <div>Guess 4 digits (e.g., 2 8 5 8): 6 6 6 6</div> <div>Guess CD CP</div> <div>2 0 2 1 0 0</div> <div>5 8 7 3 1 1</div> <div>1 2 3 4 0 0</div> <div>1 2 3 4 0 0</div> <div>5 5 5 5 1 1</div> <div>6 6 6 6 0 0</div> <div>Guess 4 digits (e.g., 2 8 5 8): 7 7 7 7</div> <div>Guess CD CP</div> <div>2 0 2 1 0 0</div> <div>5 8 7 3 1 1</div> <div>1 2 3 4 0 0</div> <div>1 2 3 4 0 0</div> <div>5 5 5 5 1 1</div> <div>6 6 6 6 0 0</div> <div>7 7 7 7 0 0</div> <div>Guess 4 digits (e.g., 2 8 5 8): 8 8 8 8</div> <div>Guess CD CP</div> <div>2 0 2 1 0 0</div> <div>5 8 7 3 1 1</div> <div>1 2 3 4 0 0</div> <div>1 2 3 4 0 0</div> <div>5 5 5 5 1 1</div> <div>6 6 6 6 0 0</div> <div>7 7 7 7 0 0</div> <div>8 8 8 8 0 0</div> <div>Guess 4 digits (e.g., 2 8 5 8): 9 9 9 9</div>		
--	---	--	--

	<pre>Guess CD CP 2 0 2 1 0 0 5 8 7 3 1 1 1 2 3 4 0 0 1 2 3 4 0 0 5 5 5 5 1 1 6 6 6 6 0 0 7 7 7 7 0 0 8 8 8 8 0 0 9 9 9 9 3 3 Guess 4 digits (e.g., 2 8 5 8): 5 5 9 9</pre>		
testWinAfter1Guess Author: Benjamin Uy	<pre>\$ java -cp bin GuessingGame 22 <<Header>> Guess 4 digits (e.g., 2 8 5 8): 2 0 2 1</pre>	<pre>Guess CD CP 2 0 2 1 4 4 You guessed correctly after 1 guess(es)!</pre>	<pre>Guess CD CP 2 0 2 1 4 4 You guessed correctly after 1 guess(es)!</pre>
testInvalidGuessWithNegativeDoublesAndIntegers Author: Benjamin Uy	<pre>\$ java -cp bin GuessingGame 55 <<Header>> Guess 4 digits (e.g., 2 8 5 8): 1.0 -1 1 -1.0</pre>	<pre>Invalid guess Guess 4 digits (e.g., 2 8 5 8):</pre>	<pre>Invalid guess Guess 4 digits (e.g., 2 8 5 8):</pre>
testThreeCorrectDigitsOneCorrectPlace Author: Benjamin Uy	<pre>\$ java -cp bin GuessingGame 5 <<Header>> Guess 4 digits (e.g., 2 8 5 8): 4 7 4 1</pre>	<pre>Guess CD CP 4 7 4 1 3 1 Guess 4 digits (e.g., 2 8 5 8):</pre>	<pre>Guess CD CP 4 7 4 1 3 1 Guess 4 digits (e.g., 2 8 5 8):</pre>
testOneCorrectDigitNoneCorrectPlace Author: Benjamin Uy	<pre>\$ java -cp bin GuessingGame 5 <<Header>> Guess 4 digits (e.g., 2 8 5 8): 4 1 0 3</pre>	<pre>Guess CD CP 4 1 0 3 1 0 Guess 4 digits (e.g., 2 8 5 8):</pre>	<pre>Guess CD CP 4 1 0 3 1 0 Guess 4 digits (e.g., 2 8 5 8):</pre>
testNoCommandLineArguments Author: Benjamin Uy	<pre>\$ java -cp bin GuessingGame</pre>	<pre><<Header>> Guess 4 digits (e.g., 2 8 5 8):</pre>	<pre><<Header>> Guess 4 digits (e.g., 2 8 5 8):</pre>