

## 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	\$ java -cp bin GuessingGame abc 123  Author: Dr. Balik	Usage: java -cp bin GuessingGame <seed> <Program exits>	Usage: java -cp bin GuessingGame <seed> <Program exits>
testNonintegerCommandLineArgument	\$ java -cp bin GuessingGame abc  Author: Dr. Balik	Usage: java -cp bin GuessingGame <seed> <Program exits>	Usage: java -cp bin GuessingGame <seed> <Program exits>
testNonintegerGuess	\$ java -cp bin GuessingGame 1  <<Header>>  Guess 4 digits (e.g., 2 8 5 8): <b>7 8 xy 9</b>	Invalid guess  Guess 4 digits (e.g., 2 8 5 8):	Invalid guess  Guess 4 digits (e.g., 2 8 5 8):
testInvalidIntegerGuess	\$ java -cp bin GuessingGame 1  <<Header>>  Guess 4 digits (e.g., 2 8 5 8): <b>9 12 0 8</b>	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): <b>8 6 4 1</b>	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	\$ java -cp bin GuessingGame 1  <<Header>>  Author: Dr. Balik  Guess 4 digits (e.g., 2 8 5 8): <b>0 1 7 2</b>	Guess   CD CP 0 1 7 2   1 1  Guess 4 digits (e.g., 2 8 5 8):	Guess   CD CP 0 1 7 2   1 1  Guess 4 digits (e.g., 2 8 5 8):
testWinAfter3Guesses	\$ java -cp bin GuessingGame 1  <<Header>>  Author: Dr. Balik  Guess 4 digits (e.g., 2 8 5 8): <b>8 5 3 7</b>  Guess   CD CP 8 5 3 7   4 0  Guess 4 digits (e.g., 2 8 5 8): <b>5 7 3 8</b>  Guess   CD CP 8 5 3 7   4 0 5 7 3 8   4 1  Guess 4 digits (e.g., 2 8 5 8): <b>5 8 7 3</b>	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)!	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)!

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

	1 2 3 4   0 0
	1 2 3 4   0 0
	5 5 5 5   1 1

Guess 4 digits (e.g., 2 8 5 8): **6 6 6 6**

	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

Guess 4 digits (e.g., 2 8 5 8): **7 7 7 7**

	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

Guess 4 digits (e.g., 2 8 5 8): **8 8 8 8**

	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

Guess 4 digits (e.g., 2 8 5 8): **9 9 9 9**

	Guess   CD CP
	2 0 2 1   0 0
	5 8 7 3   1 1

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

	Guess	CD	CP
2	0	2	1
5	8	7	3
1	2	3	4
1	2	3	4
5	5	5	5

Guess 4 digits (e.g., 2 8 5 8): **6 6 6 6**

	Guess	CD	CP
2	0	2	1
5	8	7	3
1	2	3	4
1	2	3	4
5	5	5	5
6	6	6	6

Guess 4 digits (e.g., 2 8 5 8): **7 7 7 7**

	Guess	CD	CP
2	0	2	1
5	8	7	3
1	2	3	4
1	2	3	4
5	5	5	5
6	6	6	6
7	7	7	7

Guess 4 digits (e.g., 2 8 5 8): **8 8 8 8**

	Guess	CD	CP
2	0	2	1
5	8	7	3
1	2	3	4
1	2	3	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8

Guess 4 digits (e.g., 2 8 5 8): **9 9 9 9**

	<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): <b>5 5 9 9</b> </pre>		
testWinAfter1Guess	\$ java -cp bin GuessingGame 22	<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>
Author: Benjamin Uy	<<Header>>		
testInvalidGuessWithNegativeDoublesAndIntegers	\$ java -cp bin GuessingGame 55	<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>
Author: Benjamin Uy	<<Header>>		
testThreeCorrectDigitsOneCorrectPlace	\$ java -cp bin GuessingGame 5	<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>
Author: Benjamin Uy	<<Header>>		
testOneCorrectDigitNoneCorrectPlace	\$ java -cp bin GuessingGame 5	<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>
Author: Benjamin Uy	<<Header>>		
testNoCommandLineArguments	\$ java -cp bin GuessingGame	<pre> &lt;&lt;Header&gt;&gt;  Guess 4 digits (e.g., 2 8 5 8): </pre>	<pre> &lt;&lt;Header&gt;&gt;  Guess 4 digits (e.g., 2 8 5 8): </pre>
Author: Benjamin Uy			