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 xy 9`**
		`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 0 8`**
		`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	`$ java -cp bin GuessingGame 1` `<<Header>>` `Guess 4 digits (e.g., 2 8 5 8):` **0 1 7 2**	`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 Author: Dr. Balik	`$ 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**	` 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

testGetCorrectDigitsInCorrectPlace4CorrectLength4
 	
Author:Hayden Hunter
	`$ java -cp bin GuessingGame 5`
	
	`<<Header>>`
	
	`Guess 4 digits (e.g., 2 8 5 8):` **7 2 4 4**
		`Guess  | CD CP`
		`7 2 4 4 |  4  4`
		
		`You guessed correctly after 1 guess(es)!`
			`Guess  | CD CP`
			`7 2 4 4 |  4  4`
			
			`You guessed correctly after 1 guess(es)!`

testGetCorrectDigitsInCorrectPlaceNoCorrectLength4
 	
Author:Hayden Hunter
	`$ 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):`
			`Guess  | CD CP`
			`8 5 3 7 |  4  0`
			
			`Guess 4 digits (e.g., 2 8 5 8):`

testGetCorrectDigitsInCorrectPlaceAllSame2CorrectPlaceLength4
 	
Author:Hayden Hunter
	`$ java -cp bin GuessingGame 1`
	
	`<<Header>>`
	
	`Guess 4 digits (e.g., 2 8 5 8):` **5 8 3 7**
		`Guess  | CD CP`
		`5 8 3 7 |  4  2`
		
		`Guess 4 digits (e.g., 2 8 5 8):`
			`Guess  | CD CP`
			`5 8 3 7 |  4  2`
			
			`Guess 4 digits (e.g., 2 8 5 8):`

testGetCorrectDigitsInCorrectPlace3CorrectLength4
 	
Author:Hayden Hunter
	`$ java -cp bin GuessingGame 1`
	
	`<<Header>>`
	
	`Guess 4 digits (e.g., 2 8 5 8):` **5 8 7 4**
		`Guess  | CD CP`
		`5 8 7 4 |  3  3`
		
		`Guess 4 digits (e.g., 2 8 5 8):`
			`Guess  | CD CP`
			`5 8 7 4 |  3  3`
			
			`Guess 4 digits (e.g., 2 8 5 8):`

testGetCorrectDigitsDuplicateCodeDigits
 	
Author:Hayden Hunter
	`$ java -cp bin GuessingGame 1`
	
	`<<Header>>`
	
	`Guess 4 digits (e.g., 2 8 5 8):` **5 5 9 0**
		`Guess  | CD CP`
		`5 5 9 0 |  1  1`
		
		`Guess 4 digits (e.g., 2 8 5 8):`
			`Guess  | CD CP`
			`5 5 9 0 |  1  1`
			
			`Guess 4 digits (e.g., 2 8 5 8):`

testGetCorrectDigitsGuessDuplicateDigitGuessNoDuplicate
 	
Author:Hayden Hunter
	`$ java -cp bin GuessingGame 55`
	
	`<<Header>>`
	
	`Guess 4 digits (e.g., 2 8 5 8):` **2 3 3 9**
		`Guess  | CD CP`
		`2 3 3 9 |  3  1`
		
		`Guess 4 digits (e.g., 2 8 5 8):`
			`Guess  | CD CP`
			`2 3 3 9 |  3  1`
			
			`Guess 4 digits (e.g., 2 8 5 8):`