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| **Application/ Program name:** | RandomGuessMatch |
| **Written by:** | Zachary Muerle |

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| **Purpose or problem definition:** |
| “In the “Game Zone” section in Chapter 1, you learned how to obtain a random  number. For example, the following statement generates a random number between  the constants MIN and MAX inclusive and assigns it to a variable named random:  random = 1 + (int)(Math.random() \* MAX);  Write a program that selects a random number between 1 and 5 and asks the  user to guess the number. Display a message that indicates the difference  between the random number and the user’s guess. Display another message  that displays the random number and the Boolean value true or false depending  on whether the user’s guess equals the random number. Save the file as  RandomGuessMatch.java.” |
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| **Program Procedures:** |
| While the input isn’t complete: open an input dialog for a user to enter a string  Cast this string into a short (if this fails, ask for a new string)  Check if the short is between 1 and 5, inclusive. If it is: continue. If not: go back  Generate a random number between 1 and 5  Compare the random value and the user’s value. If they’re the same, say so. If not: tell them their value and the random value, and how far off they were  Finally: display another message box stating the random number, and if the user’s input was the same, in Boolean form |
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| **Algorithm/Processing/Conditions:** |
| **Inputs: chosenNumber** |
| Must be cast-able to a short, and be between 1 and 5 |
| **Processes: randNumber** |
| **(short) (1 + (Math.random() \* 5))** |
| **Outputs: Message** |
| Tells the user information about how close their guess was to the random number |
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| **Notes & Restriction:** |
| The random value can only be between 1 and 5, so we restrict the user’s inputs to the same range |
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| **Comments:** |
| This code is nearly identical to RandomGuess |