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| **User Input** |

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| **Your Tasks (Mark these off as you go)** |
| * Write a class to accept user input * Write a dice simulator * Write a swap algorithm * Create a partial Mad Libs game * Receive credit for this lab guide |

* **Write a class to accept user input**

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| Consider a class file called UserInput which can accept user input from the user using a Scanner. In the space below, write the UserInput class. The class should include the required imports and declare and initialize a new Scanner object. |
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* **Write a dice simulator**

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| Using the Scanner you declared above write code that could be used to prompt the user for two integers between 4 (inclusive) and 12 (inclusive). The numbers provided correspond to the number of sides on a given die. Now, write code that could be used to simulate the dice being rolled. Below is sample output,   |  |  |  | | --- | --- | --- | | **Input for die 1** | **Input for die 2** | **Output** | | 5 | 10 | You rolled a 3 and a 10 | | 4 | 6 | You rolled a 4 and a 1 | | 8 | 12 | You rolled a 4 and a 6 | |
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* **Write a swap algorithm**

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| Using the Scanner you declared above write code that could be used to prompt the user for two integers between 0 and 100 (inclusive). The first number should be assigned to an int variable type a, and the second to an int variable type b. Now, write code that could be used to swap the values and print the result to the console. Below is sample output.   |  |  |  | | --- | --- | --- | | **int a** | **int b** | **Output** | | 5 | 10 | The value of a is 10, the value of b is 5 | | 4 | 6 | The value of a is 6, the value of b is 4 | | 80 | 12 | The value of a is 12, the value of b is 80 | |
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* **Create a partial Mad Libs game**

Mad Libsis a phrasal template word game where one player prompts the other for a list of words to substitute for blanks in a story, before reading the – often comical or nonsensical – story aloud. Consider the following example,

"\_\_\_\_\_\_\_\_\_\_\_! he said \_\_\_\_\_\_\_\_ as he jumped into his convertible

*exclamation adverb*

\_\_\_\_\_\_ and drove off with his \_\_\_\_\_\_\_\_\_ wife."

*noun adjective*

Beneath each blank is specified a category, such as "[noun](https://en.wikipedia.org/wiki/Noun)", "[verb](https://en.wikipedia.org/wiki/Verb)", "place", "celebrity," "Exclamation" or "part of the body".

Write code that could be used to prompt the user for at least 5 pieces of information. The information you collect, must include the following data types: String, int, double

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* **Receive Credit for this lab guide**

Submit this portion of the lab to Pluska to receive credit for the lab guide. Once received, your completed code challenges will also be graded and will count towards your final lab grade.