

## Web 2 - Assignment Lab - Dice Roll Simulation

**Specs:** Simulate the roll of an input number of dice. Use a randomly-generated number to simulate the roll of each single die and remember that JavaScript counts from zero. **Hint:** use two methods of the **Math** object, **Math.random()** and **Math.floor()**, to randomly generate an integer between **1** and **6** inclusive.

\*\*\* **Remember to follow specs!** \*\*\*

### Input:

- Prompt user for their first name storing it in a variable called **fName** and validate that **fName** is not empty. Re-prompt until a name is entered. Note that the prompt boxes may look a little different in various browser which is ok.

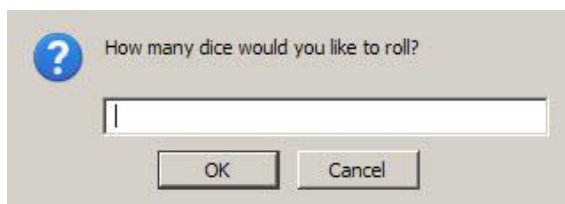


A dialog box with a blue question mark icon. The text reads "Please enter your first name:". Below the text is a text input field. At the bottom are two buttons: "OK" and "Cancel".

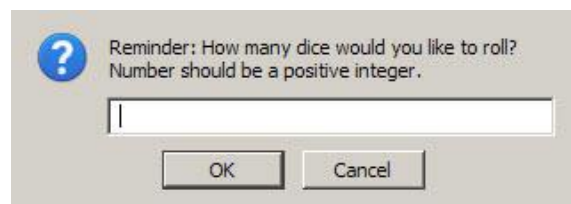


A dialog box with a blue question mark icon. The text reads "Reminder: Please enter your first name:". Below the text is a text input field. At the bottom are two buttons: "OK" and "Cancel".

- Prompt user for the number of dice to be included in the roll storing it in a variable called **numDice**. Re-prompt if the entered number of dice is not a number, or not an integer greater than zero. Use the **isNaN(numDice)** function to see if it is not a number. Then, compare the results of **parseFloat(numDice)** and **parseInt(numDice)** to each other. If they are not equal, then **numDice** is not an integer. Then simply check if **numDice** is less than or equal to zero. If any of these checks are true, you need to re-prompt for **numDice**.
- Note that these checks should be done in a certain order to be efficient, yet correct and also note the wording of the messages in the prompt boxes shown below.



A dialog box with a blue question mark icon. The text reads "How many dice would you like to roll?". Below the text is a text input field. At the bottom are two buttons: "OK" and "Cancel".



A dialog box with a blue question mark icon. The text reads "Reminder: How many dice would you like to roll? Number should be a positive integer.". Below the text is a text input field. At the bottom are two buttons: "OK" and "Cancel".

**Output** has two parts and should look like the following:

**Part 1:** One **alert box** for each die displaying what the value of each die roll was:

Example:



**Part 2:**

Display to the web page via **document.write()** how many dice were rolled, the value of each die, and the grand total of the dice once their values are added together. Note the use of **commas** and the word "**and**" below in the examples depending on how many dice were rolled. Use decision-making logic to determine what the case is for the current number of dice.

When only one die is rolled there should be no **commas** or "**and**" around the die value.

When two dice are rolled there should be no comma separating the two die values, but the word "**and**" should be between them. When three or more dice are rolled there should be commas after each die value except the last one and the word "**and**" should be between the last two die values following a comma.

**Do NOT use arrays** in your logic. You will need to use either string concatenation to build your output string or output as you have information to build on previous output.

\*\*\*Also, when looking at the three output example cases below, try to find the **pattern** in the output of the die value(s). Use the pattern to come up with your decision logic for determining when a die value needs to be followed by a comma or preceded by the word "and".

Use the example message format shown below:

Example (one die):

Rolling 1 die...  
Hey Jon, you rolled a 2 for a grand total of 2

Hope you had fun rolling the dice!

Example (two dice):

Rolling 2 dice...

Hey Jon, you rolled a 6 and 4 for a grand total of 10

Hope you had fun rolling the dice!

Example (three or more dice):

Rolling 5 dice...

Hey Jon, you rolled a 5, 1, 5, 3, and 1 for a grand total of 15

Hope you had fun rolling the dice!

**Reminder:** do **NOT** use *arrays* in this program

**Submit** your **dieRoll\_yourUsername.html**, **dieRoll\_yourUsername.css** and **dieRoll\_yourUsername.js** files in a zipped folder named **dieRoll\_yourUsername**.