

5.6: Birthday Demo

Learning Objectives

- Become familiar with the properties of the birthday problem

Instructions

Most people's intuition about the probability of two people in a group sharing a birthday is way off. This simulation allows you to approach this problem concretely.

When you click the "Draw Birthday" button, a birthday is randomly drawn from the dates listed. The date drawn is listed on the left in red and shown in the list of dates in red. As you push the button, more dates will be shown. If a date is a duplicate, it will be shown in blue on the left. The "Show Duplicates" button shows all duplicate dates drawn.

Illustrated Instructions

The screenshot below shows opening state of the birthday problem demonstration. Each time you click the "Draw Birthday" button a random date is drawn from the calendar and displayed under the button. Any duplicates are highlighted in blue and you can click the "Show Duplication Info" button to see summary data of all duplicates.

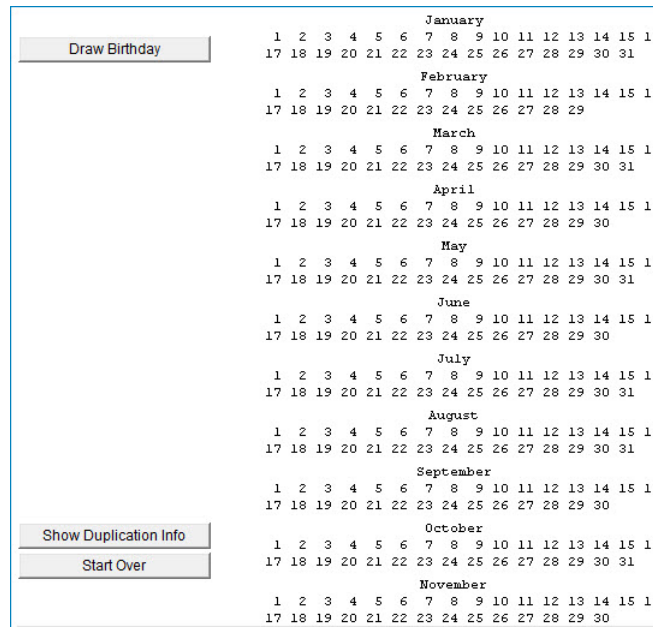


Figure 5.6.1: Opening state of birthday problem demonstration

Below is an example of 30 drawn dates with one duplicate "10/18". The summary that appears when the "Show Duplication Info" button is clicked is also shown.

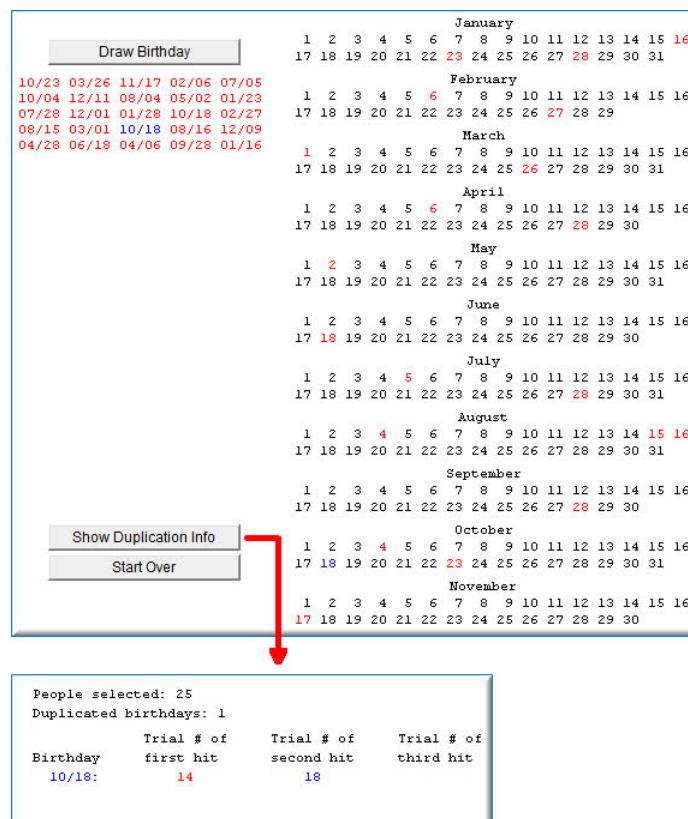


Figure 5.6.2: Example of 30 drawn dates with one duplicate

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