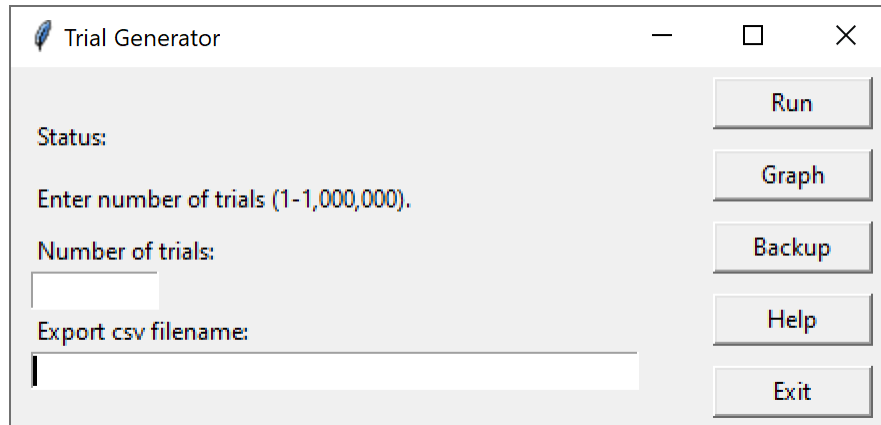


## Monty Hall Test Generator:

### Overview:

The Monty Hall Test Generator is an application that randomly generates the testing conditions necessary to validate the Monty Hall problem. Any number of tests between 1-1,000,00 can be run, and the program features the ability to generate a graph, as well as backup collected data to a database.



### Features:

**Run:** Used to run the specified number of trials, which are exported to a csv file.

**Graph:** Generates a graph from a specified csv file.

**Backup:** Exports data from a csv file into a local database.

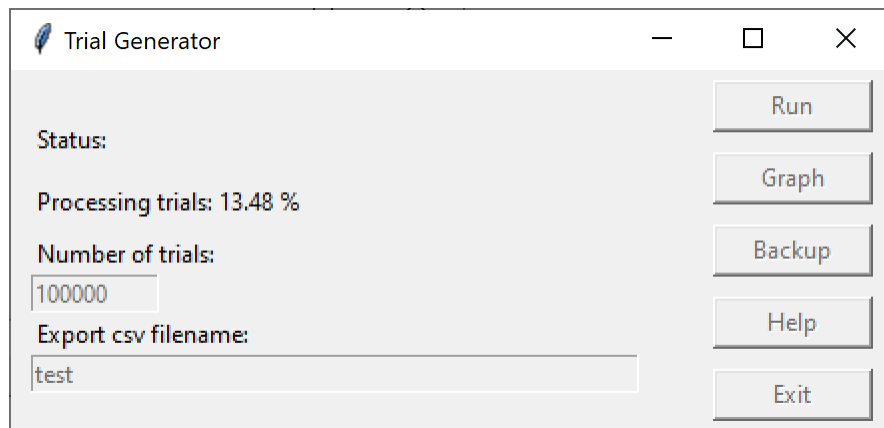
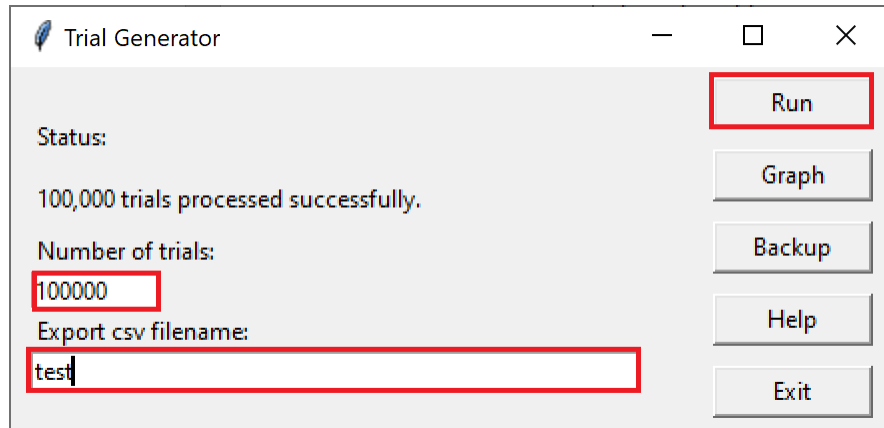
**Help:** Link to this help file.

**Exit:** Closes the window and terminates the application.

### Instructions:

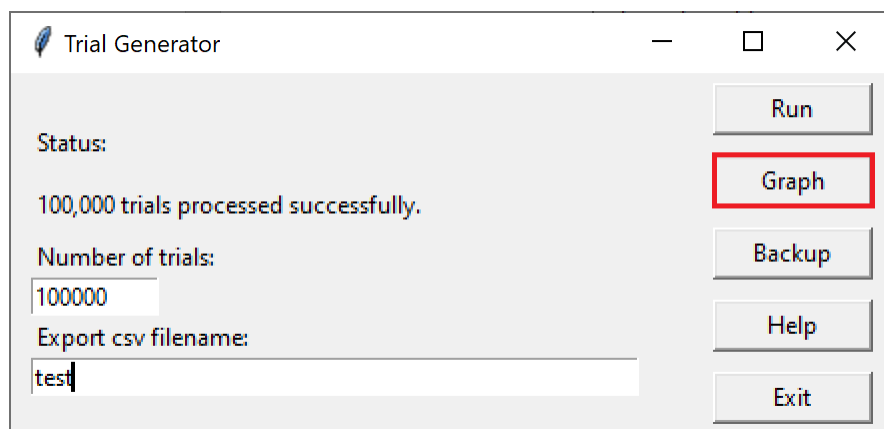
#### Running Tests:

This application supports running any number of trials between 1 to 1,000,000. The greater number of trials, the better accuracy with demonstrating the Monty Hall Problem. To run a series of tests, simply enter the number of test you wish to run in the "Number of trials" box and specify a file name in the "Export csv filename:" box as shown below. When ready, simply click on the "Run" button to run the trial generator. The number of tests will be run and stored in the specified csv file, which is located in the same folder as this application. A progress percentage will be displayed showing the status of the trial-run. The more trials selected, the longer this process will take.

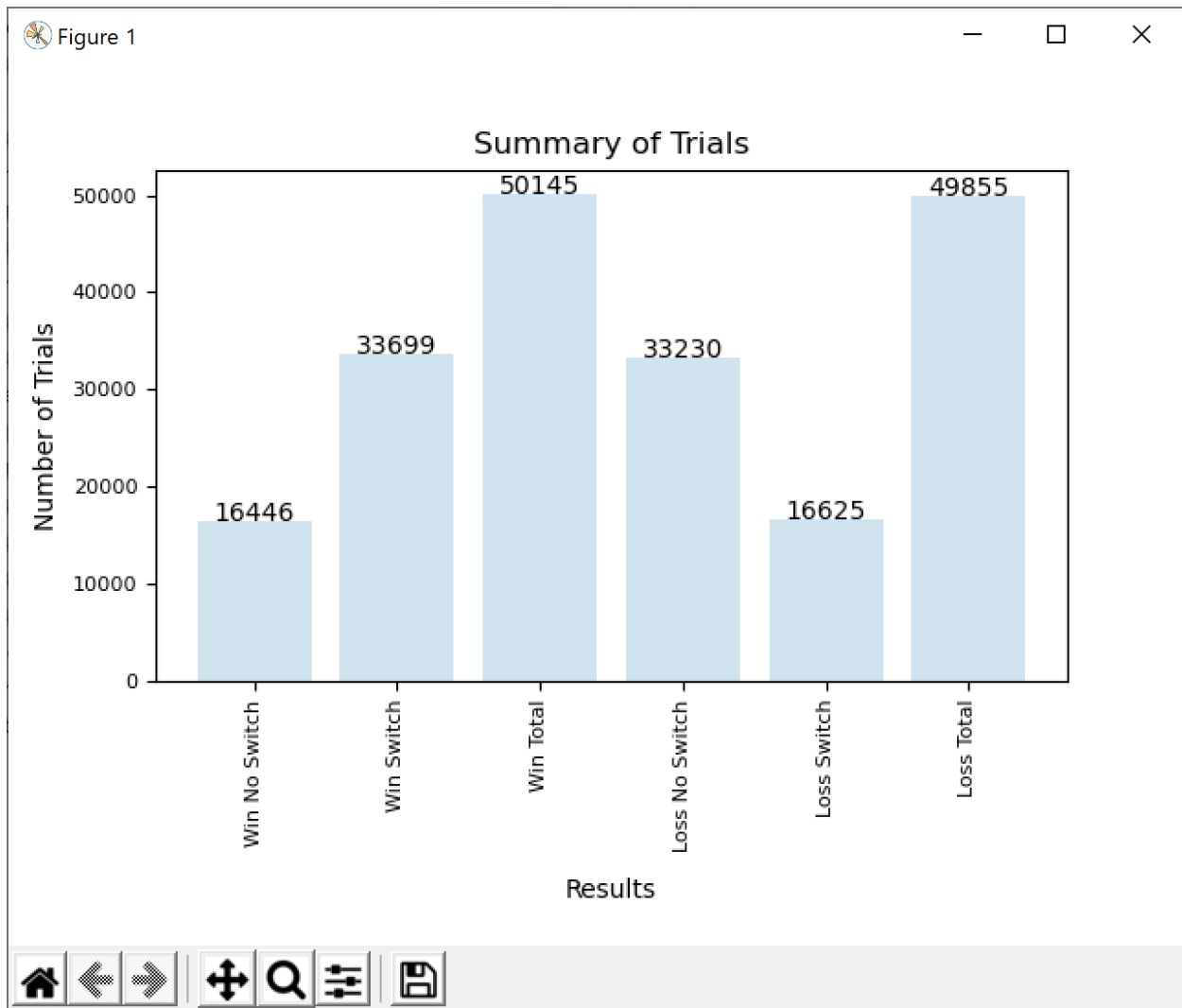


## Generating Graphs:

After a trial-run has been completed, you can generate a graph of the results using the “Graph” button. To generate a graph, type in the name of the csv file you wish to generate a graph for and press the “Graph” button. If you recently ran a trial-run, then the file name should still be available.

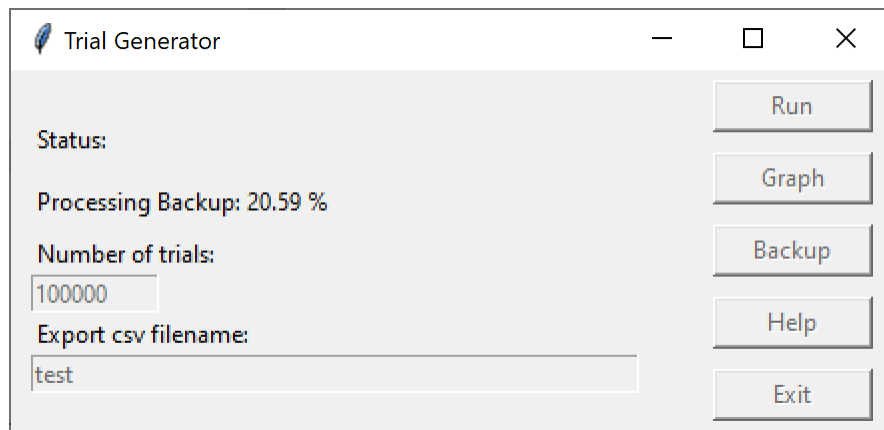
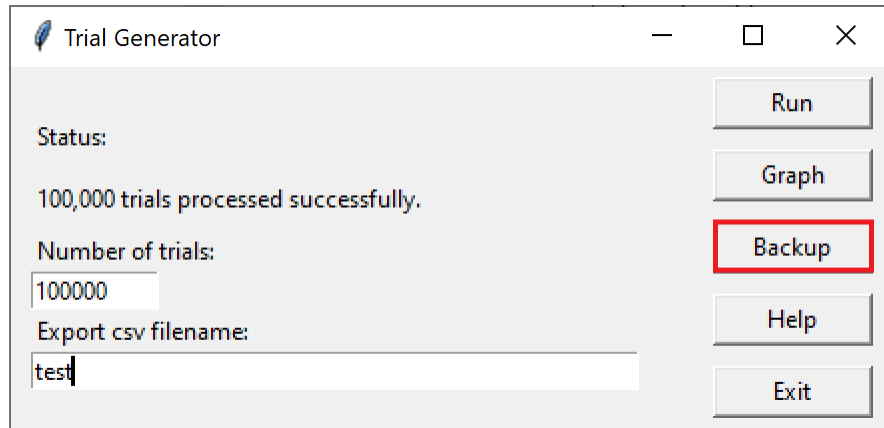


Example of bar chart:



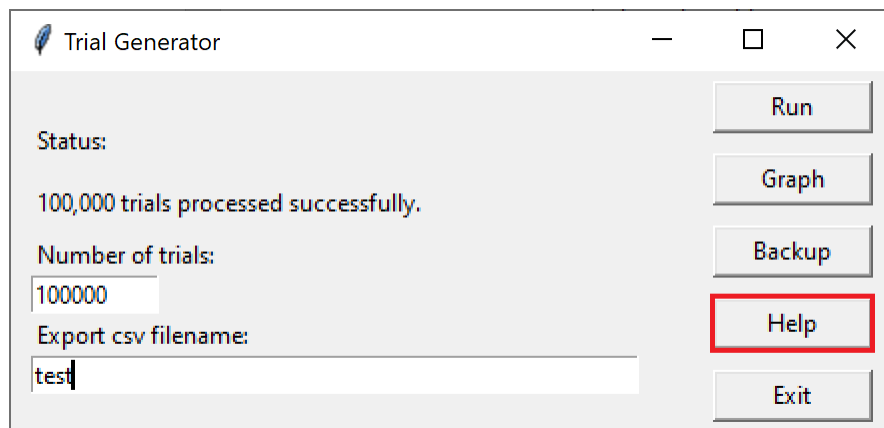
### Backing up to a database:

To backup to a database, enter the name of the csv file you wish to backup, and press the “Backup” button. A progress percentage will display showing the status of the backup. If a trial-run was completed recently, then the file name should still be available. The data will be backed up to a database located in the same folder as this application under the name backup.db. Each time the backup is run, it will create a new table matching the csv file name.



## Help File:

You may access this help file at any time by clicking on the “Help” button.



**Exiting the Application:**

To exit the application, simply select the “Exit” button, or click on the “X” in the top-right corner.

**Additional Information:**

For additional information or questions regarding this application, please feel free to contact the author, Tom Sorteberg, at [tsorteberg@dmacc.edu](mailto:tsorteberg@dmacc.edu).