Implementation Design Explanation

We were given sample data so I thought to recreate the sample data first step by step then make changes for bonus points. When creating the machine project, my thought process as I was programming was the following:

1.) First, was making a function that displays the donkeys' position, I thought to visualize it first as visualizing helps me.
2.) Get user input and use conditionals to modify the donkeys' displayed position based on the user's input.
3.) Check for the game end conditions and display "Game Over" if those conditions are met
4.) Check for all possible user selection errors and inform the user.
5.) Clean up code and debug.
6.) Add bonus features, and debug again.

User-defined Functions

Function Name	Description	Input Parameters	Return Data
applySpeedup	Applies the speedup condition to the donkeys, must be a minimum of 1	donkey - the donkey to apply the speedup towards.	The speed of the donkey after applying the speedup
checkIfGameDone	Checks if all the conditions to end the game are met	- d1 - location of donkey 1 - d2 - location of donkey 2 - d3 - location of donkey 3 - d4 - location of donkey 4	Returns false (0) if all donkeys have not crossed and true (1) if all donkeys have crossed.
mSleep	Makes console pause for a given amount of milliseconds	time - the amount of time the console pauses in milliseconds	none