Project Parlay

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Concept

This application is meant to take user input for the capital they'd like place down on what games and tell them the best way to split that bet (called a Parlay) to win back the most capital.

Background and Literature

- What is a parlay?
  - a single bet that links together two or more individual wagers and is dependent on all of those wagers winning together
- Insert information of background literature used for development
- Potential personal anecdote to help inform motivations

Implementation (Front-end and Back-end)

- Python tkinter for interactive front end
  - simple , clean, and easy to use
- Can also print the ASCII results into a webpage to view
- SQLite for backend
  - Database full of game info that is queried by our program
- Supported by simulated annealing algorithm
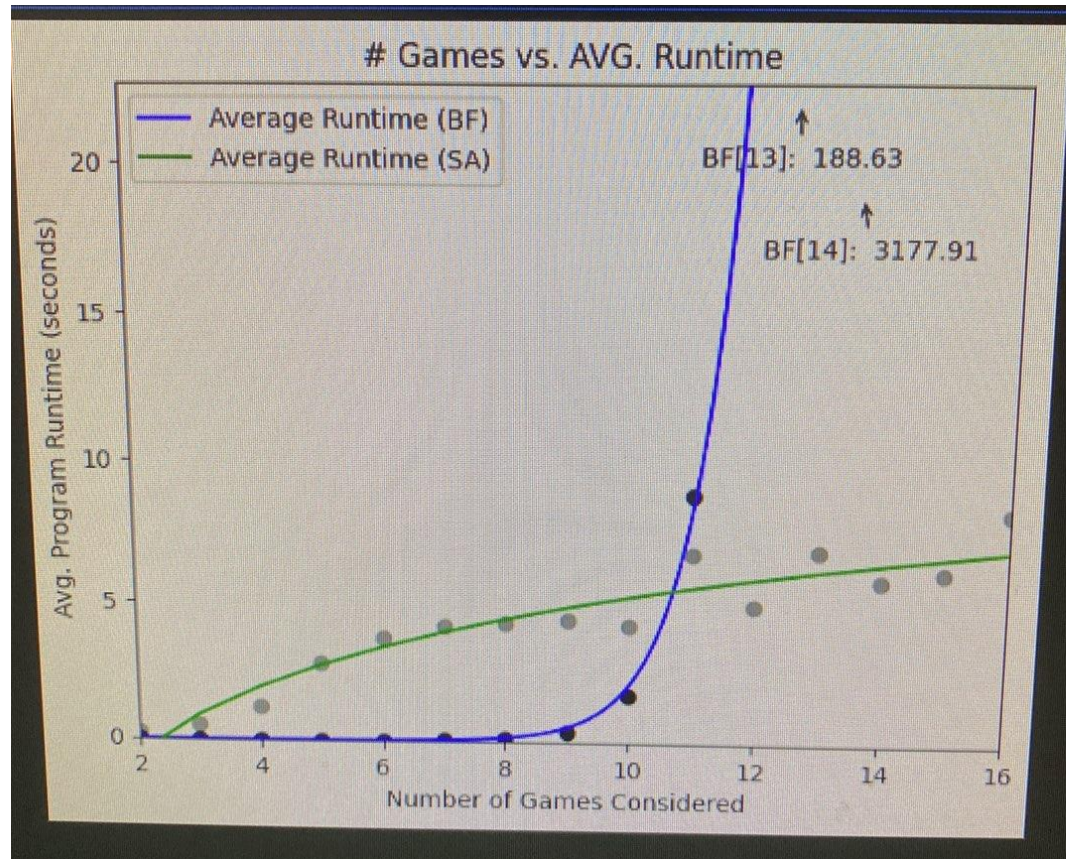
Runtime Comparison between Brute Force(BF) and Simulated Annealing(SA)

Results and Achievements

- We were able to accomplish the main feature of the program of calculating the best parlays for the user based on their input
- We were not able to get it directly ported to a web app but the results can still be accessed in an HTML opened in a browser or a tkinter window

Future Directions

- Database can be expanded to include more sports and their relevant stats
  - Horse racing would be a large target audience, but almost any sport can work
- Further optimization with more specialized algorithms
- Calling an API to get live results from games and active parlays
- Creating a more sophisticated front-end