Python Project – NASCAR

Objectives

To engage in Discovery Learning and build a team-based Python programming project. The Python documentation may be found at https://www.python.org/.

The program will consist of a simulated 500-lap NASCAR race (Hint! Do your testing on very much less than 500 laps, then increase it when your program is working!). The winner will be the car that completes the race in the minimum amount of time.

Specifications

- 20 cars will compete in the race, numbered 1 through 20.
- Each car will have a named driver, e.g. "Jeff Gordon."
- Each car will have a named sponsor, e.g. "Team Penske."
- Each lap will generate a random speed for that lap for each car, the speeds to be between 0 and 200 mph.
- Each lap will be one mile.
- A running total of duration will be kept for each car.
- At the end of the race, a scoreboard will be printed in order from shortest duration to longest duration, containing the car number, driver name, and sponsor.
- A congratulation message will be printed for the winner.