Project 1: Factors affecting F1 races (graphs)

The governing body of F1 racing, the FIA, has tasked data analysts from "F1 Fanatics" to review data from 1950 until 2021 to investigate factors affecting F1 races to help them grow the sport and better plan races for the future.

1. How many races in each country; H0: Races are not distributed equally around the world  
    Plot count of country in circuits.csv  
   Result/Trend: e.g. agree with null hypothesis, dominated in Europe  
   Recommendation: e.g. Consider holding races in other countries/distribute races more equally

2. Country of origin for each constructor/team; H0: The majority of teams are not based in Europe  
       Plot name vs nationality in constructors.csv  
Trend: e.g. agree with alternative hypothesis, majority of teams ARE based in Europe  
Recommendation: e.g. Investigate if other automotive companies are interested in competing

3. Country of origin for drivers; H0: Nationality of drivers are not from all parts of the world  
    Plot count of nationality of driver in drivers.csv  
Trend: agree with H0  
Recommendation: Consider investing in driver programs in other countries to increase diversity

4.  Starting grid positions affect podium position (1st, 2nd, 3rd); H0: The grid position does not affect podium position  
       Starting grid position vs finishing position. Look at top 20 starting grid positions due to less grid positions over recent years

5. Do pit stops affect final position; H0: Pit stop time or number of pit stops do not affect final position  
    i) Average total pit time vs final race results  
    ii) Number of pit stops vs final race results

6. Are there any correlations on:  
    i) Do fastest lap times occur at the same point in a race; H0: fastest laps do not occur at the beginning of the race

7. Is there a correlation between team and fastest speed/have any teams been more dominant  
   H0: There is no difference in fastest speed between teams/ No teams have been dominant  
   Plot constructor ID vs fastest lap speed (results.csv)