**Which engine performed better in 2021?**

*IV: engine type*

*DV: position*

Analysis: independent t test

**Which has more influence over outcome: driving skill or constructor?**

*IV: Driving Skill defined as: grid, fastest lap speed, fastest lap time, pit stop time, constructor id*

*DV: position*

Analysis: backward elimination stepwise regression

**Can Machine Learning predict winning driver/constructor?**

**Which driver/constructor will win the next race?**

*Using constructor, grid position, pit stop times, fastest lap speed and fastest lap time to predict final position.*

Analysis: Machine Learning

**Wrangling to do:**

* *Jessica:*
* *Add these columns to pit stop sheet from the results sheet:*
  + *Constructor id*
  + *Grid*
  + *Position*
  + *Fastest lap speed*
  + *Fastest lap time*
  + *Engine Maker*
* *Cut down data to just 2021*
* *Sharron:*
* Write function to add engine type per constructor ID
* Apply engine type function to engine column to fill the column with data
* Convert fastest lap time to milliseconds
* Check data types: all recodes should be numerical

**Engine Types & Constructors:**

Honda: 0

Mercedes: 1

Ferrari: 2

Renault: 3

2021:

**9 :** Red Bull: Honda **0**

**131 :** Mercedes : Mercedes **1**

**6 :** Ferrari : **2**

**1** : McLaren: Mercedes **1**

**213 :** Alpha Tauri: Honda **0**

**214 :** Alpine: Renault **3**

**117 :** Aston Martin: Mercedes **1**

**3 :** Williams: Mercedes **1**

**51 :** Alfa Romeo: Ferrari **2**

**210 :** HAAS: Ferrari **2**

**Race IDs for 2021:**

1051 - 1073