Brilliant Cassowary's Coffee Research

Preregistration of analyses

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Inserting the dataset on Coffee

```
library(tidyverse)
```

```
-- Attaching core tidyverse packages ------------------------ tidyverse 2.0.0 --
v dplyr     1.1.4     v readr     2.1.5
v forcats   1.0.0     v stringr   1.5.1
v ggplot2   3.4.4     v tibble    3.2.1
v lubridate 1.9.3     v tidyr     1.3.0
v purrr     1.0.2
-- Conflicts ------------------------------------------ tidyverse_conflicts() --
x dplyr::filter() masks stats::filter()
x dplyr::lag()    masks stats::lag()
i Use the conflicted package (<http://conflicted.r-lib.org/>) to force all conflicts to becor
```

```
coffee_df<-read_csv("data/GACTT_RESULTS_ANONYMIZED_v2.csv")
```

```
Rows: 4042 Columns: 113
-- Column specification --------------------------------------------------------
Delimiter: ","
chr (44): Submission ID, What is your age?, How many cups of coffee do you t...
dbl (13): Lastly, how would you rate your own coffee expertise?, Coffee A - ...
lgl (56): Where do you typically drink coffee? (At home), Where do you typic...

i Use `spec()` to retrieve the full column specification for this data.
i Specify the column types or set `show_col_types = FALSE` to quiet this message.
```

```
#rubric
# The preregistered analyses reflect deep and critical thinking about the real-world applicat
```

Hypothesis 1

Younger people 18 - 25 prefer their coffee with lighter roasts.

Analysis: Run a linear (or logistic, if that fits better) regression where we input each age category as a discrete variable and output a prediction of the probability of preferring lighter roasts (refer to HW6 ex 2). We consider lighter roasts to be Light, Nordic, or Medium according to the roast_level column. The first age-group, which is the 18-25 age group, will be the reference variable, so we can see if the coefficents for the other age groups is not 0, so they factor into a lighter roast level preference. .

Hypothesis 2

Replace with your hypothesis.

Analysis: Replace with your analysis plan.