Olakunle_R for Research Capstone Project

Quarto

```
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   3.5.1     v tibble    3.2.1
v lubridate 1.9.3     v tidyr     1.3.1
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
```

```
library(knitr)
```

```
emission_data <- read_csv("emission_data.csv")
```

```
Rows: 132 Columns: 5
-- Column specification --------------------------------------------------------
Delimiter: ","
chr (3): entity, code, products
dbl (2): emission, per_capital_emission

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.
```

```r
head(emission_data, 10)
```

```
# A tibble: 10 x 5
   entity    code  products       emission per_capital_emission
   <chr>     <chr> <chr>             <dbl>                <dbl>
 1 Australia AUS   Rice             879389.                0.524
 2 Australia AUS   Wheat             41497.                0.524
 3 Australia AUS   Other Cereals     89034.                0.524
 4 Austria   AUT   Rice             184118.                0.353
 5 Austria   AUT   Wheat             15495.                0.353
 6 Austria   AUT   Other Cereals     30146.                0.353
 7 Belgium   BEL   Rice             458813.                0.971
 8 Belgium   BEL   Wheat             50685.                0.971
 9 Belgium   BEL   Other Cereals     86200.                0.971
10 Brazil    BRA   Rice           10277208.                2.71
```

```r
head(emission_data, 25)
```

```
# A tibble: 25 x 5
   entity    code  products       emission per_capital_emission
   <chr>     <chr> <chr>             <dbl>                <dbl>
 1 Australia AUS   Rice             879389.                0.524
 2 Australia AUS   Wheat             41497.                0.524
 3 Australia AUS   Other Cereals     89034.                0.524
 4 Austria   AUT   Rice             184118.                0.353
 5 Austria   AUT   Wheat             15495.                0.353
 6 Austria   AUT   Other Cereals     30146.                0.353
 7 Belgium   BEL   Rice             458813.                0.971
 8 Belgium   BEL   Wheat             50685.                0.971
 9 Belgium   BEL   Other Cereals     86200.                0.971
10 Brazil    BRA   Rice           10277208.                2.71
# i 15 more rows
```

```r
summary(emission_data)
```

```
    entity              code             products           emission
 Length:132         Length:132         Length:132         Min.   :    1309
 Class :character   Class :character   Class :character   1st Qu.:   17533
 Mode  :character   Mode  :character   Mode  :character   Median :   79844
                                                          Mean   :  933255
```

```
                                                    3rd Qu.:  316456
                                                    Max.   :62291319
 per_capital_emission
 Min.   :0.06882
 1st Qu.:0.20271
 Median :0.38503
 Mean   :0.50759
 3rd Qu.:0.50162
 Max.   :2.77977
```

```
names(emission_data)
```

```
[1] "entity"               "code"                 "products"
[4] "emission"             "per_capital_emission"
```

```
ggplot(
  emission_data, aes(per_capital_emission)) + geom_density(col = "dodgerblue"
) + labs(title = "Emission Data Graph",
         caption = "Olakunle, 2024") + theme_minimal()
```