

MCG Data

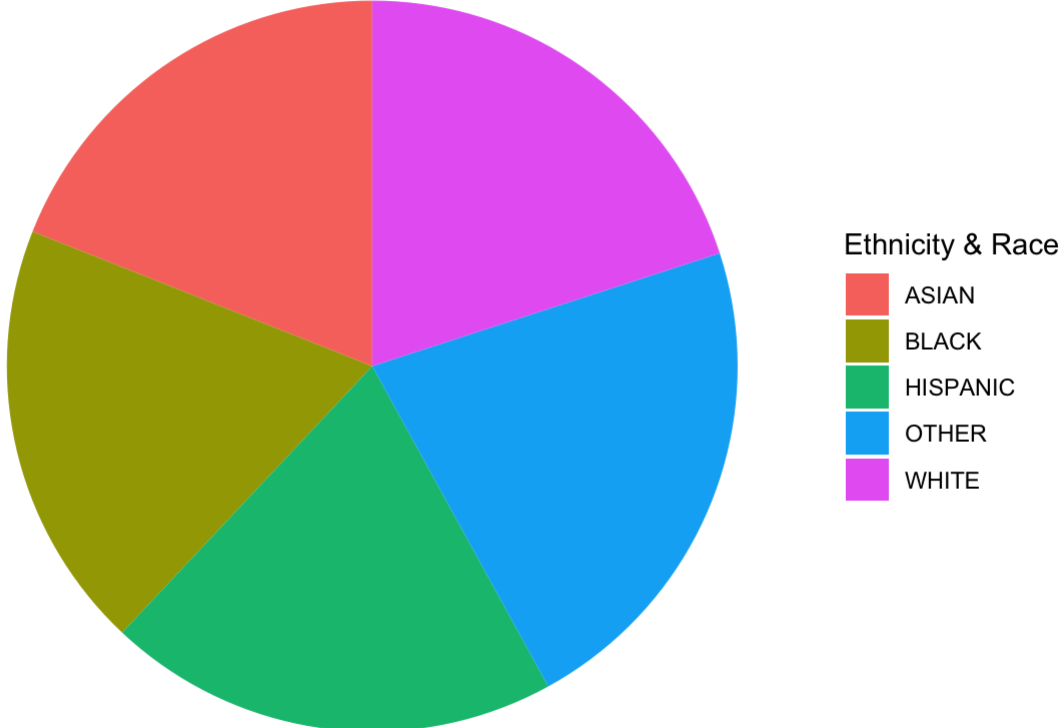
2023-07-22

```
# Install the necessary packages if not already installed
#install.packages("readxl")
library(readxl)
#install.packages("ggplot2")
library(ggplot2)

# Read the data into a data frame
data <- read_excel("Desktop/DATA1.xlsx")

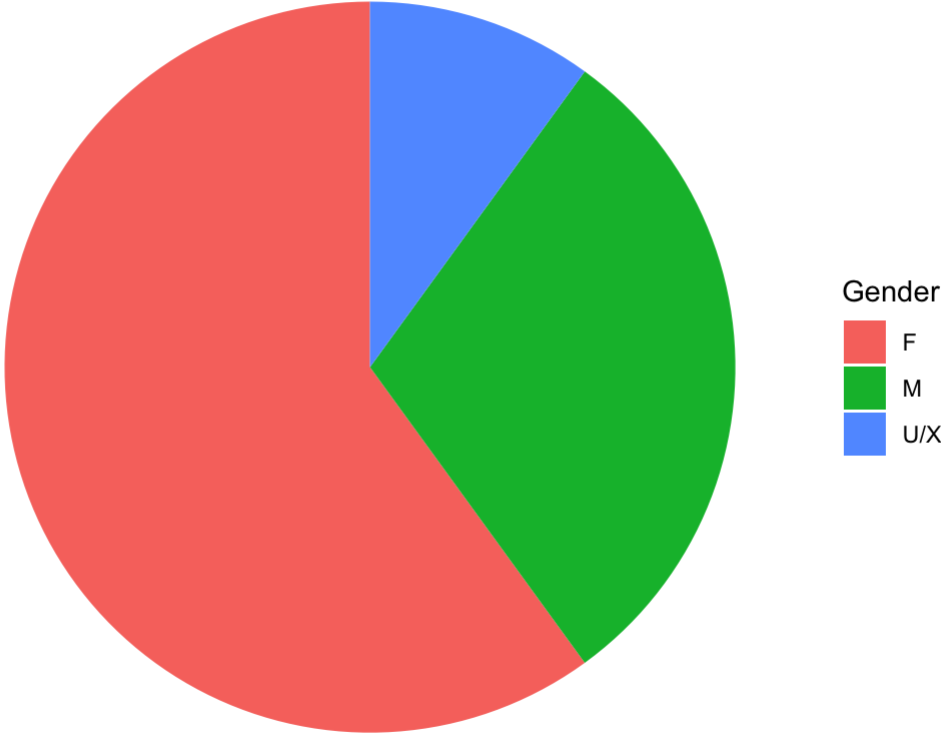
# Bar plot: Ethnicity & Race breakdown
ggplot(data, aes(x = "", fill = `Ethnicity & Race`)) +
  geom_bar(width = 1) +
  coord_polar(theta = "y") +
  labs(title = "Ethnicity & Race Breakdown") +
  theme_void()
```

Ethnicity & Race Breakdown



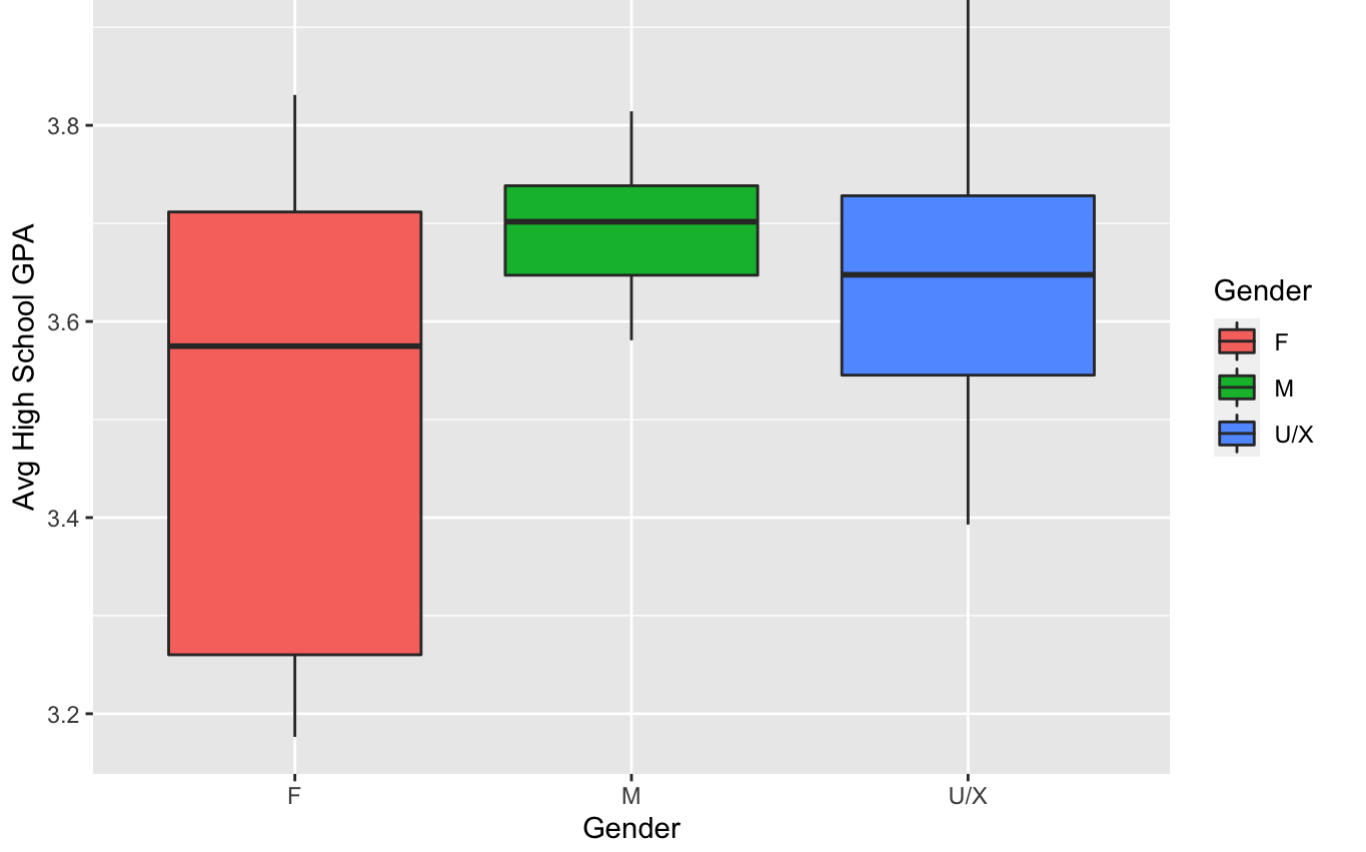
```
# Bar plot: Gender breakdown
ggplot(data, aes(x = "", fill = Gender)) +
  geom_bar(width = 1) +
  coord_polar(theta = "y") +
  labs(title = "Gender Breakdown") +
  theme_void()
```

Gender Breakdown



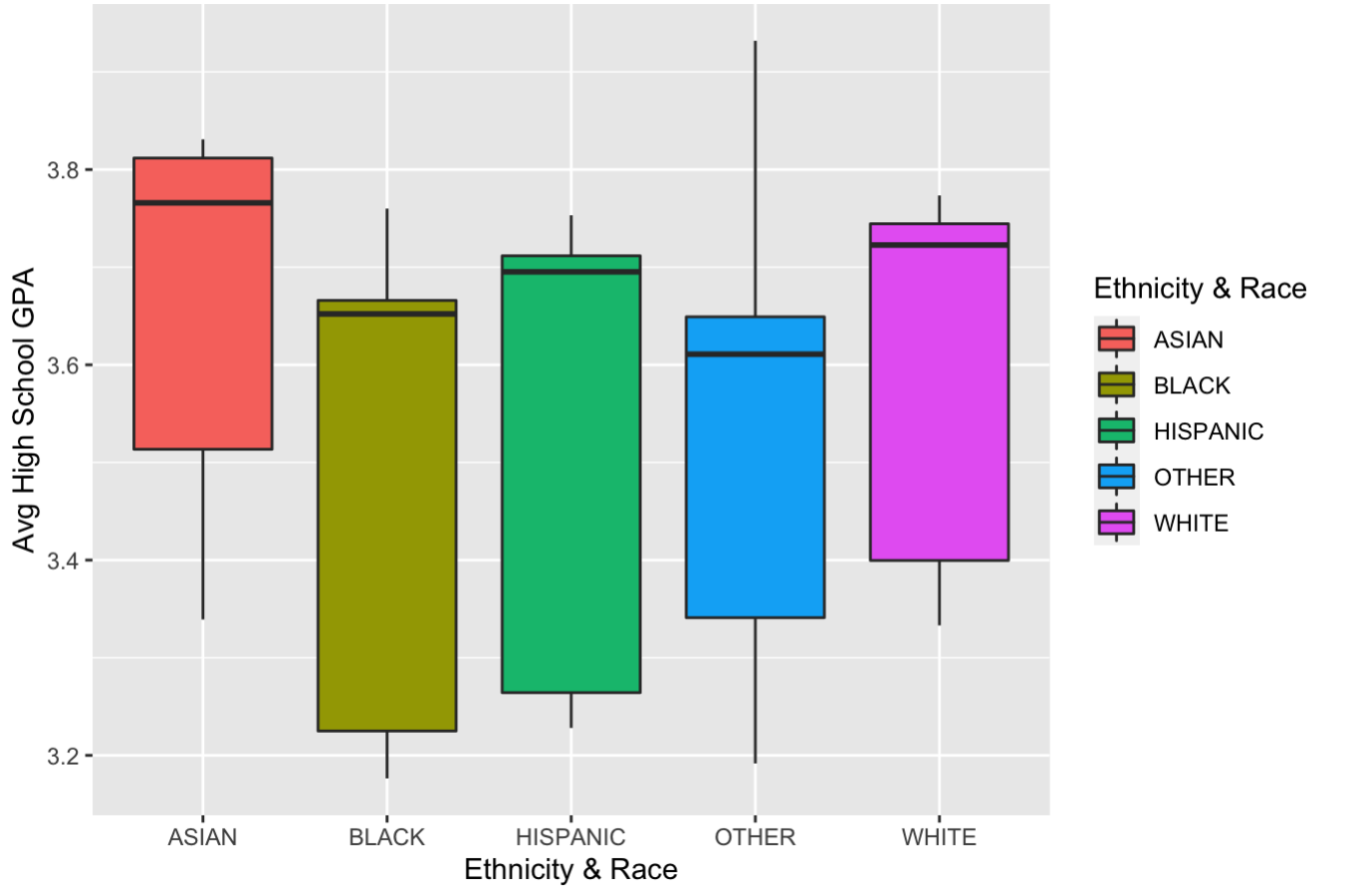
```
# Box plot: Average High School GPA by Gender
ggplot(data, aes(x = Gender, y = `Avg High School GPA`, fill = Gender)) +
  geom_boxplot() +
  labs(title = "Average High School GPA by Gender")
```

Average High School GPA by Gender



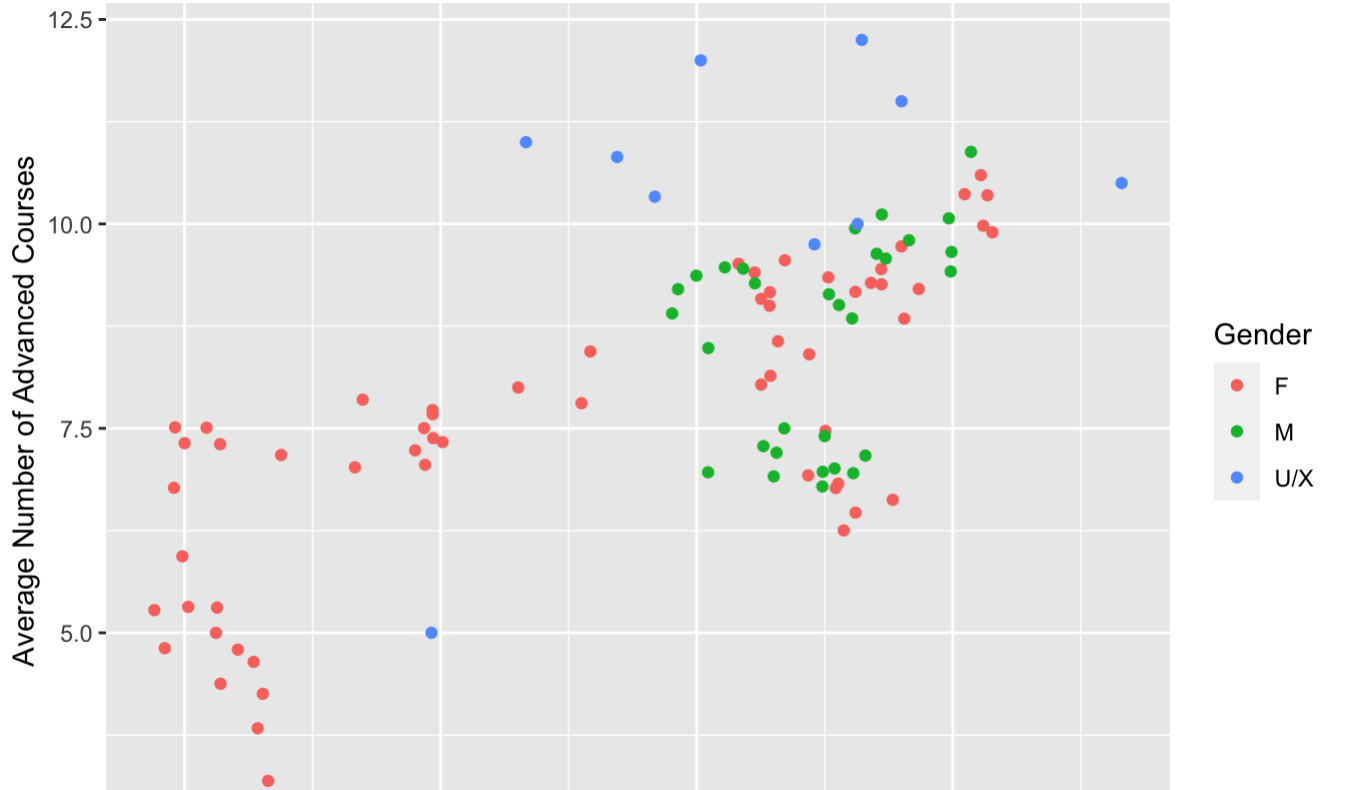
```
# Box plot: Average High School GPA by Ethnicity & Race
ggplot(data, aes(x = `Ethnicity & Race`, y = `Avg High School GPA`, fill = `Ethnicity & Race`)) +
  geom_boxplot() +
  labs(title = "Average High School GPA by Ethnicity & Race")
```

Average High School GPA by Ethnicity & Race



```
# Scatter plot: Average High School GPA vs. Average Number of Advanced Courses
ggplot(data, aes(x = `Avg High School GPA`, y = `Average Number of Advanced Courses`, color = Gender)) +
  geom_point() +
  labs(title = "Average High School GPA vs. Average Number of Advanced Courses")
```

Average High School GPA vs. Average Number of Advanced Courses



You can customize these plots further by adding appropriate labels, legends, theme s, etc. as per your requirements.