Install ggplot2 package

A screenshot of a computer

Description automatically generated

Load the dataset



Inspect Dataset



A number on a white background

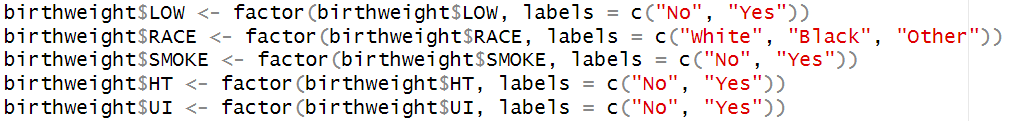
Description automatically generated



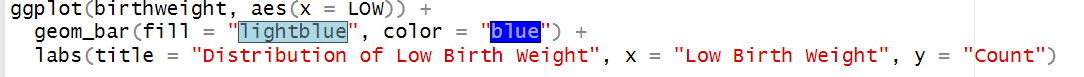
A screenshot of a computer screen

Description automatically generated

Convert necessary columns to factors



1. Univariate analysis
2. Bar plot for LOW (Low Birth Weight)

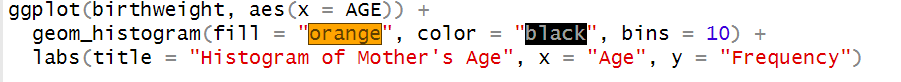


A chart with a blue rectangle

Description automatically generated

Most births are not classified as low birth weight.

1. Histogram for AGE (Age of the Mother)

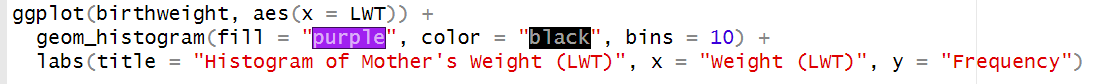


A graph of a graph of age

Description automatically generated with medium confidence

Most mothers are in their 20s and 30s, with a few older mothers in the dataset.

1. Histogram for LWT (Weight at Last Menstrual Period)

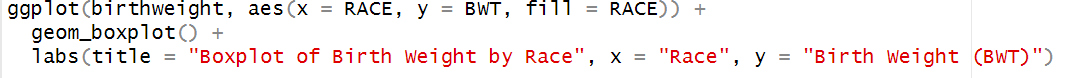


A graph of a weight

Description automatically generated

The weights range from about 80 to 180 pounds, with most mothers around 130 pounds.

1. Bivariate analysis
2. Box plot of Birth Weight (BWT) by Race



A graph with different colored squares

Description automatically generated

There is some variation, but no race appears to have significantly different birth weights on average.

1. Scatter plot of Birth Weight (BWT) against Mother's Weight (LWT)

A close up of a text

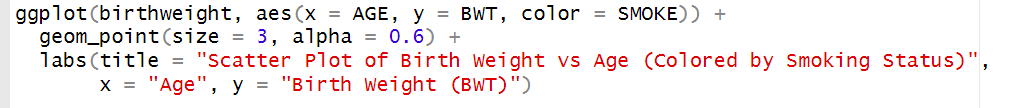
Description automatically generated

A diagram of birth weight vs mother weight

Description automatically generated

Heavier mothers tend to have babies with higher birth weights.

1. Scatter plot of Birth Weight against Age, colored by Smoking Status



A diagram of a scatter plot

Description automatically generated

There is a positive relationship between the mother's age and birth weight, though it's less clear.

1. Box plot of Birth Weight by History of Hypertension

A white background with red text

Description automatically generated

A graph with red and blue squares

Description automatically generated

The box plot shows that mothers with a history of hypertension tend to have lower birth weight babies compared to those without a history of hypertension.