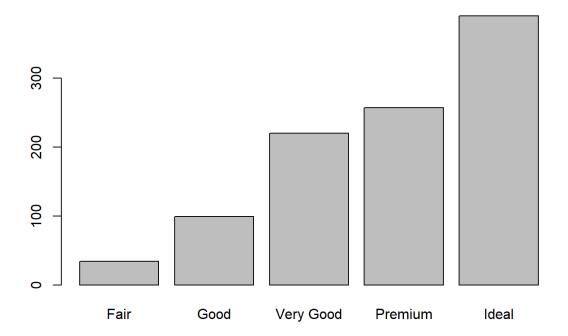
## Unit - I

**Univariate Data Visualization:** Univariate data visualization focuses on representing and understanding the distribution of a single variable. Various types of charts and plots are used, depending on the scale type of the variable:

- For nominal and ordinal variables: Bar charts, stacked bar charts, and pie charts are commonly used to visualize the distribution of categories.
- For interval and ratio variables: Histograms, box plots, and density plots (kernel density plots) are employed to display the distribution of numerical data.

## Barchart using base graphics



Data visualization helps in identifying patterns, outliers, and understanding the central tendency and spread of the variable.