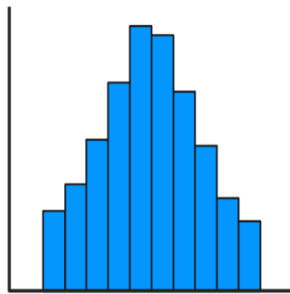
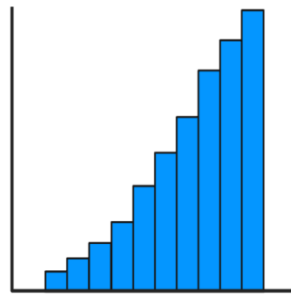


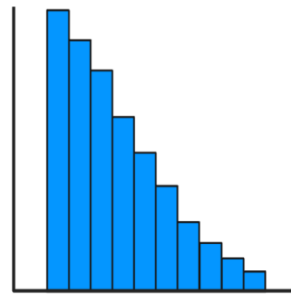
Histogram Distributions



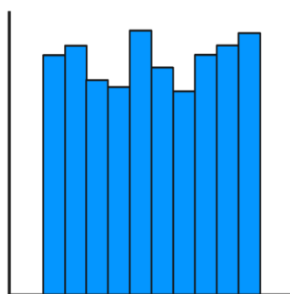
Normal distribution



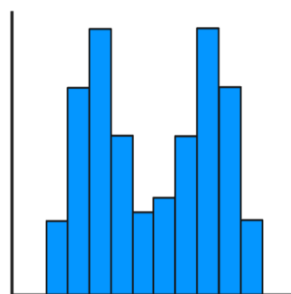
Left-skewed distribution



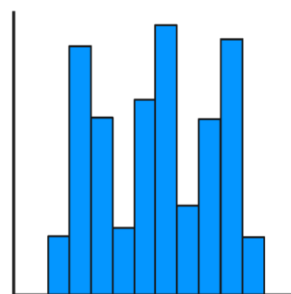
Right-skewed distribution



Uniform distribution



Bimodal distribution



Multimodal distribution

1. Normal Distribution

- This looks like a hill or a bell.
 - Most data is in the middle, fewer on the sides.
-

2. Left-Skewed Distribution

- The tail is longer on the left side.
 - Most data is on the right.
-

3. Right-Skewed Distribution

- The tail is longer on the right side.
 - Most data is on the left.
-

4. Uniform Distribution

- All bars are about the same height.
 - Data is spread out evenly.
-

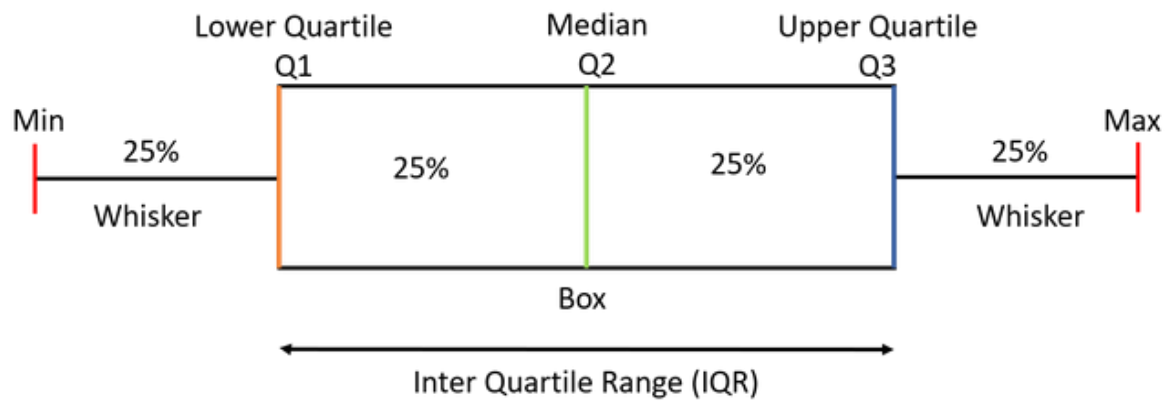
5. Bimodal Distribution

- There are two high points (peaks).
 - It means there are two main groups.
-

6. Multimodal Distribution

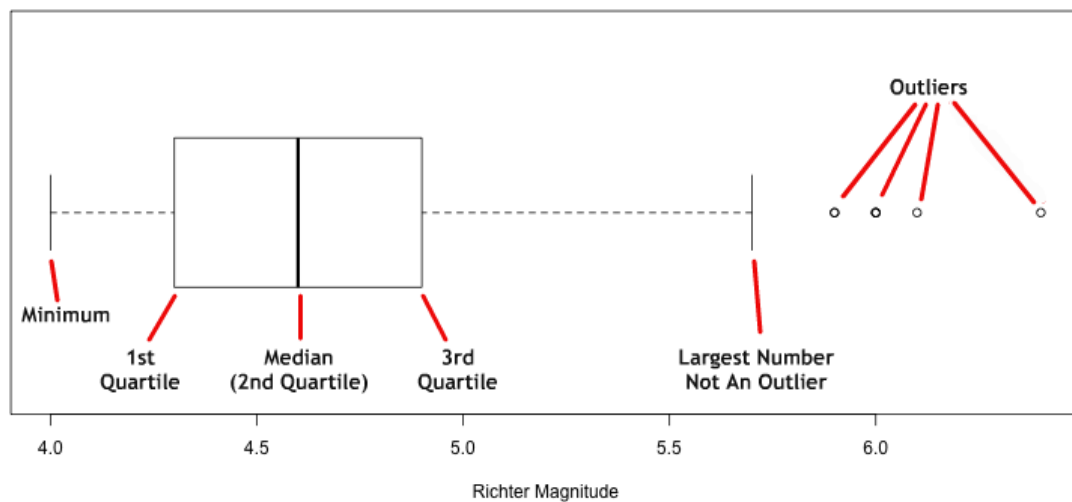
- There are many high points.
- Shows many groups or patterns in the data.

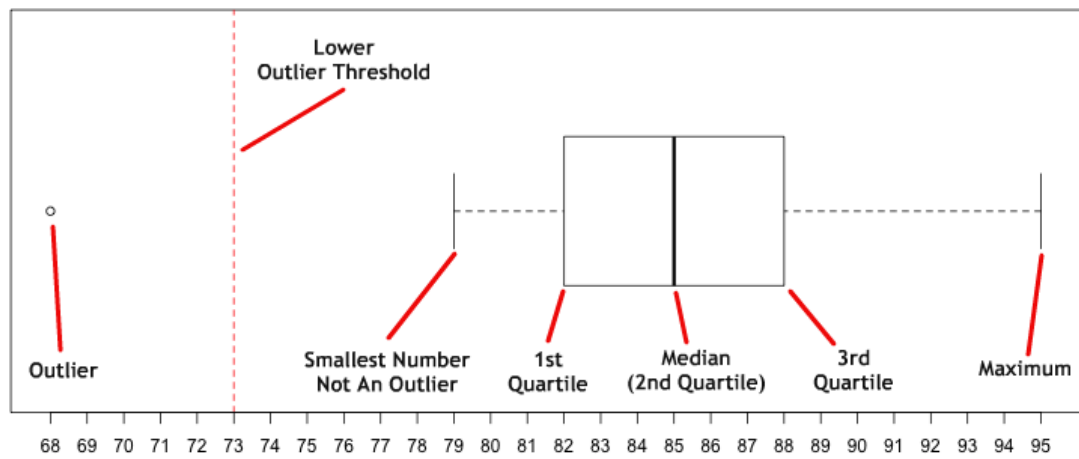
Box Plot



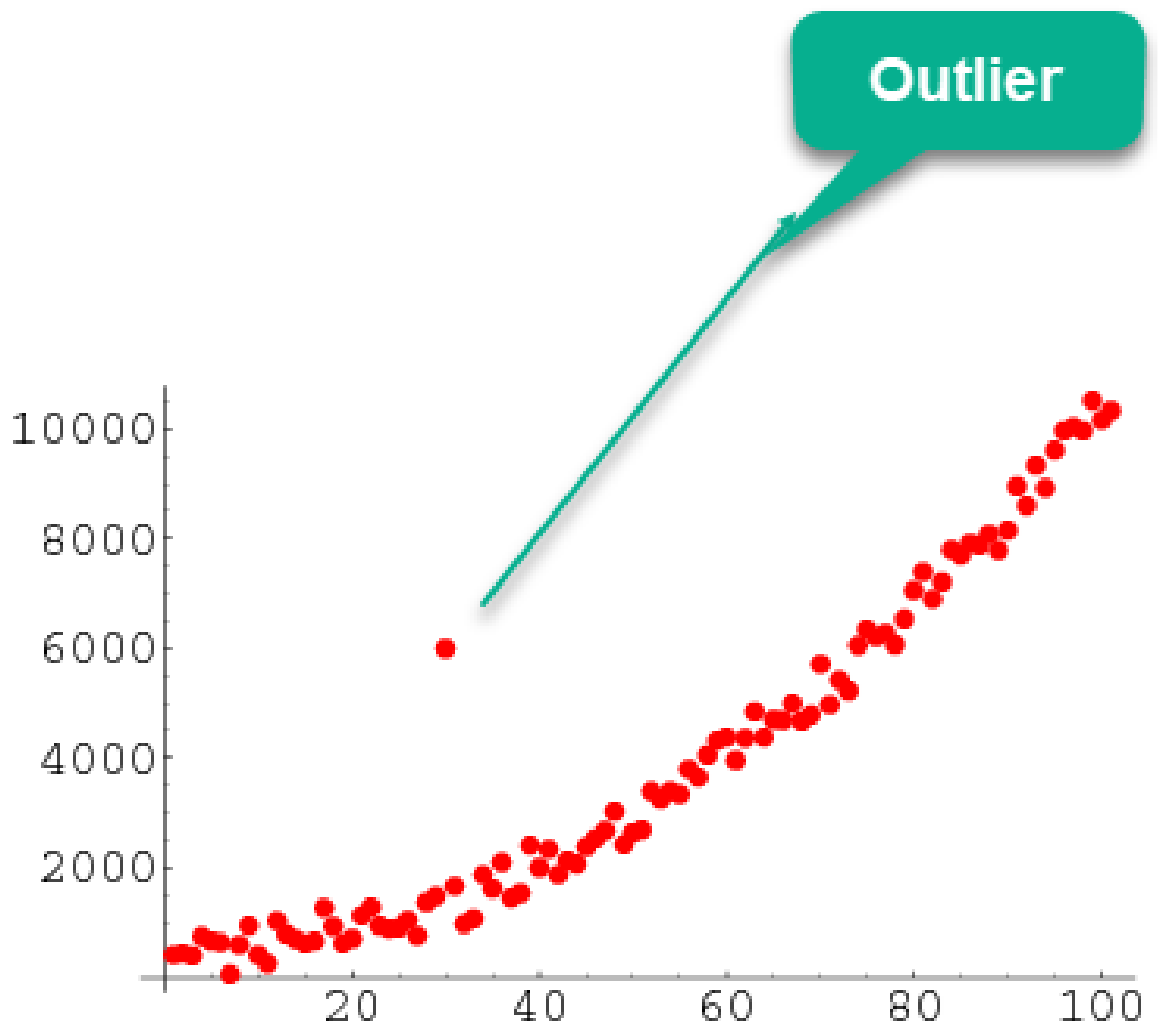
- A **box plot** shows the spread of data using 5 key numbers: **Minimum, Q1, Median, Q3, Maximum**.
- The **box** shows the middle 50% of the data (from Q1 to Q3), and the **line in the box** is the median.
- The **lines (whiskers)** on both sides show the lowest and highest values (without outliers).

Boxplot of Richter Magnitude for Earthquakes off Fiji





Scatter Plot



A **scatter plot** is a graph with dots that show the relationship between two things (variables).

Each dot shows one point of data, and the pattern helps us see if the variables are related.

