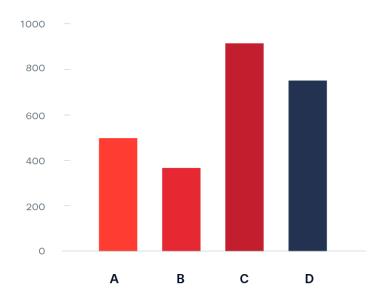


# What is a Bar Chart?

A bar chart represents categorical data with rectangular bars. The length/height of the bar is proportional to the value it represents.



# When to Use a Bar Chart

Use a bar chart when:

- You compare categories (e.g., sales by region).
- You want to visualize counts or frequencies.
- You need clear visual differences between groups.

# **Types of Bar Charts**



Туре	Description	Use Case
Vertical Bar Chart	Bars are vertical.	Default, clear for fewer categories.
Horizontal Bar Chart	Bars are horizontal.	Long category names.
Grouped Bar Chart	Groups multiple bars for each category.	Compare sub-categories.
Stacked Bar Chart	Stacks values on top of each other.	Show parts of a whole.

# **Application of Bar Charts**

## 1. Sales by Product Category

**Use Case**: A retail manager wants to compare monthly sales across product categories (e.g., Electronics, Clothing, Groceries).

Why Bar Chart: It shows which categories are performing better.

#### Example:

Product Sales
Electronics 15000
Clothing 12000
Groceries 18000

## 2. Website Traffic by Source



**Use Case**: A digital marketer tracks how many visitors came from different sources—Google, Facebook, Twitter, and Direct.

Why Bar Chart: Easy comparison of sources and traffic volume.

#### Example:

Source Visitors
Google 8000
Facebook 5500
Twitter 2200
Direct 6000

### 3. Student Performance by Subject

Use Case: A teacher wants to visualize the average scores of students in different subjects.

Why Bar Chart: Clearly shows subjects with strong or weak performance.

#### Example:

Subject Avg Score
Math 85
Science 90
English 78

History 82

## 4. Company Employee Count by Department

Use Case: HR wants to compare how many employees are in each department.

Why Bar Chart: Shows distribution of workforce visually.

#### Example:

Department Employees

IT 50 HR 20 Sales 35 Marketing 40



## 5. Monthly Revenue Growth

Use Case: A business tracks its revenue over several months to identify growth patterns.

Why Bar Chart: Easily shows month-on-month performance.

## Example:

Month	Revenue (\$)
Jan	10000
Feb	12000
Mar	15000
Apr	18000