

## 2. What screen sizes are currently available, and which are the most frequent?

- **Data needed:**

- screen\_size (or rounded screensize\_inch)
- Count of Model\_No

- **Chart type:**

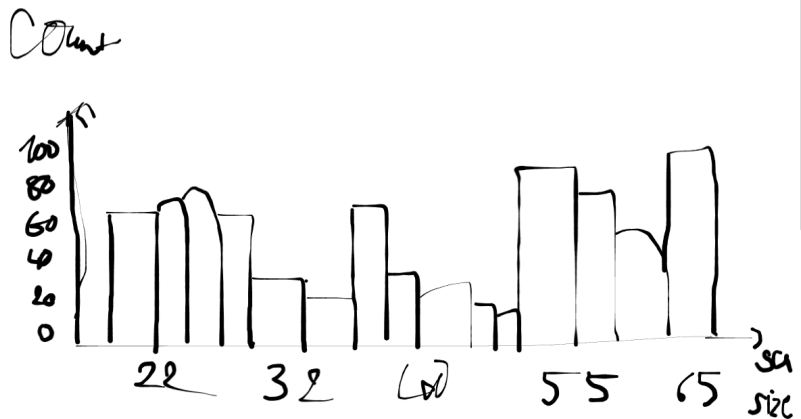
- Histogram / Bar chart

- **Sketch of chart:**

- X-axis: Screen size categories (22, 32, 40, 50, 55, 65, 75, etc.)
- Y-axis: Count of models
- Bars sorted by increasing size

- **Data table sketch:**

| scr-size | count |
|----------|-------|
| 22       | 69    |
| 32       | 36    |
| 40       | 37    |
| 55       | 96    |
| 65       | 99    |



### 3. Which brands have the greatest number of different models?

- **Data needed:**

- Brand
- Count of distinct Model\_No

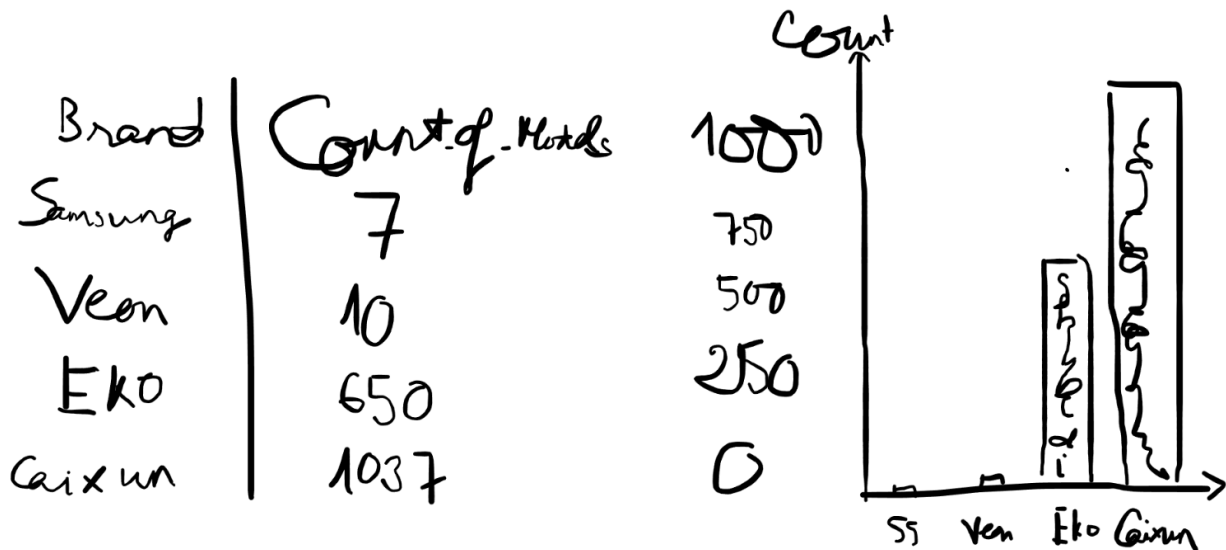
- **Chart type:**

- Bar chart

- **Sketch of chart:**

- Y-axis: Brand names (Samsung, LG, Sony, Hisense, etc.)
- X-axis: Number of models
- Horizontal bars sorted descending

- **Data table sketch:**



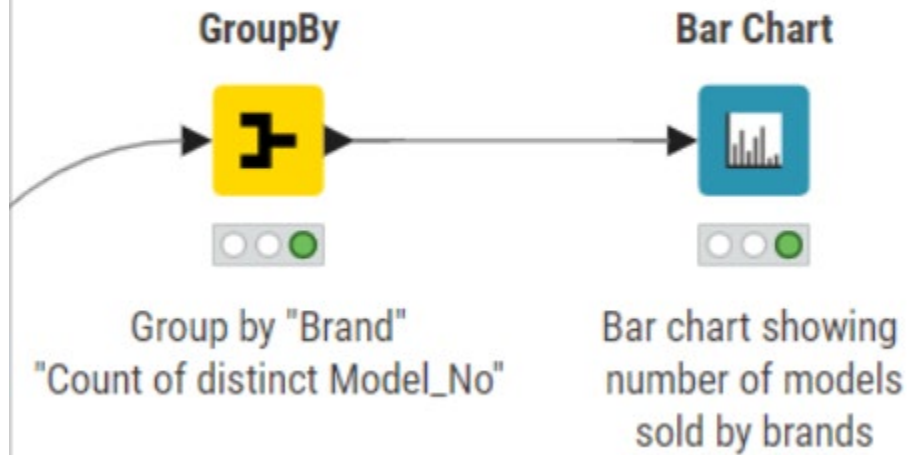
► 1: Group table Flow Variables

Rows: 94 | Columns: 3

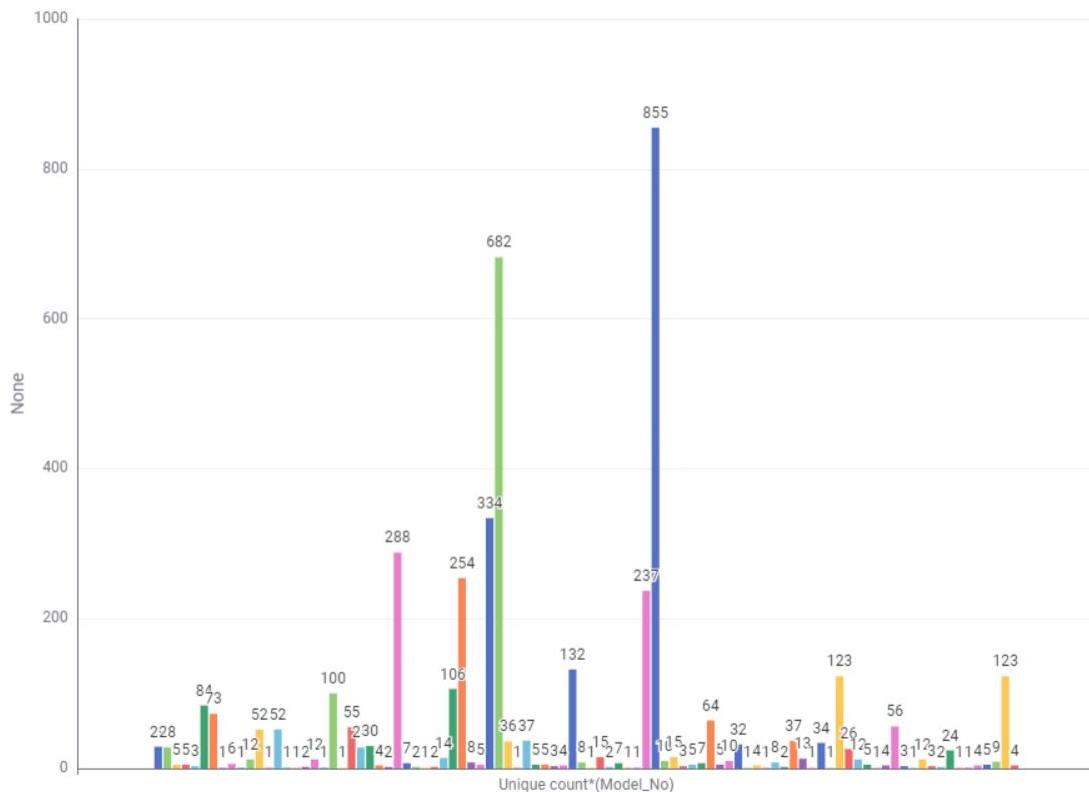
Table Statistics

| <input type="checkbox"/> | # | RowID | Brand_Reg<br><small>[T] String</small> | Unique count*(Model_No)<br><small>[N] Number (Integer)</small> |
|--------------------------|---|-------|--|--|
| <input type="checkbox"/> | 1 | Row0  | AIWA                                   | 29   |
| <input type="checkbox"/> | 2 | Row1  | AKAI                                   | 28   |
| <input type="checkbox"/> | 3 | Row2  | AOA                                    | 5  |
| <input type="checkbox"/> | 4 | Row3  | Altius                                 | 5  |

### Question 3



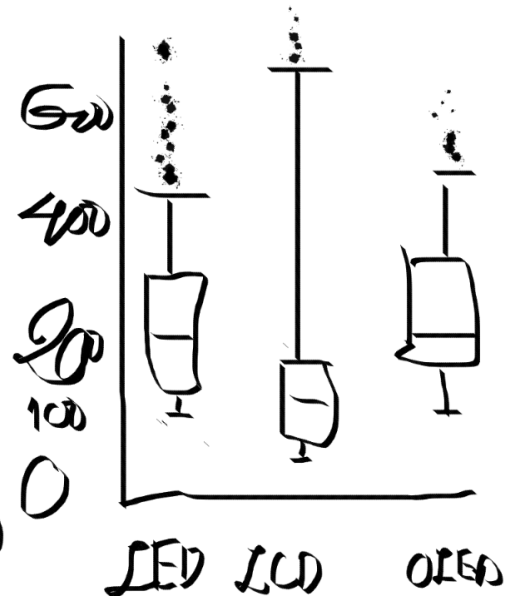
Bar Chart



#### 4. Which type of screen technology consumes the least amount of power?

- **Data needed:**
  - Screen\_Tech
  - Average Avg\_mode\_power
- **Chart type:**
  - Box plot / Bar chart.
- **Sketch of chart:**
  - X-axis: Screen technologies
  - Y-axis: Avg power consumption (watts)
  - Bars showing mean power
- **Data table sketch:**

| Screen_tech | Avg_Power |
|-------------|-----------|
| LED         | 35        |
| OLED        | 18        |
| LCD         | 97        |



► 1: Group table Flow Variables

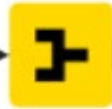
Rows: 1514 | Columns: 2

Table Statistics

| #                          | RowID | Screen_Tech<br><small>[T] String</small> | Avg_mode_power<br><small>[M] Number (Float)</small> |
|----------------------------|-------|--|---|
| <input type="checkbox"/> 1 | Row0  | LCD                                      | 13.4  |
| <input type="checkbox"/> 2 | Row1  | LCD                                      | 14.89   |
| <input type="checkbox"/> 3 | Row2  | LCD                                      | 14.9  |
| <input type="checkbox"/> 4 | Row3  | LCD                                      | 15.1  |

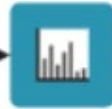
## Question 4

GroupBy



Group by "Screen\_Tech" and  
"Average Avg\_mode\_power"

Bar Chart

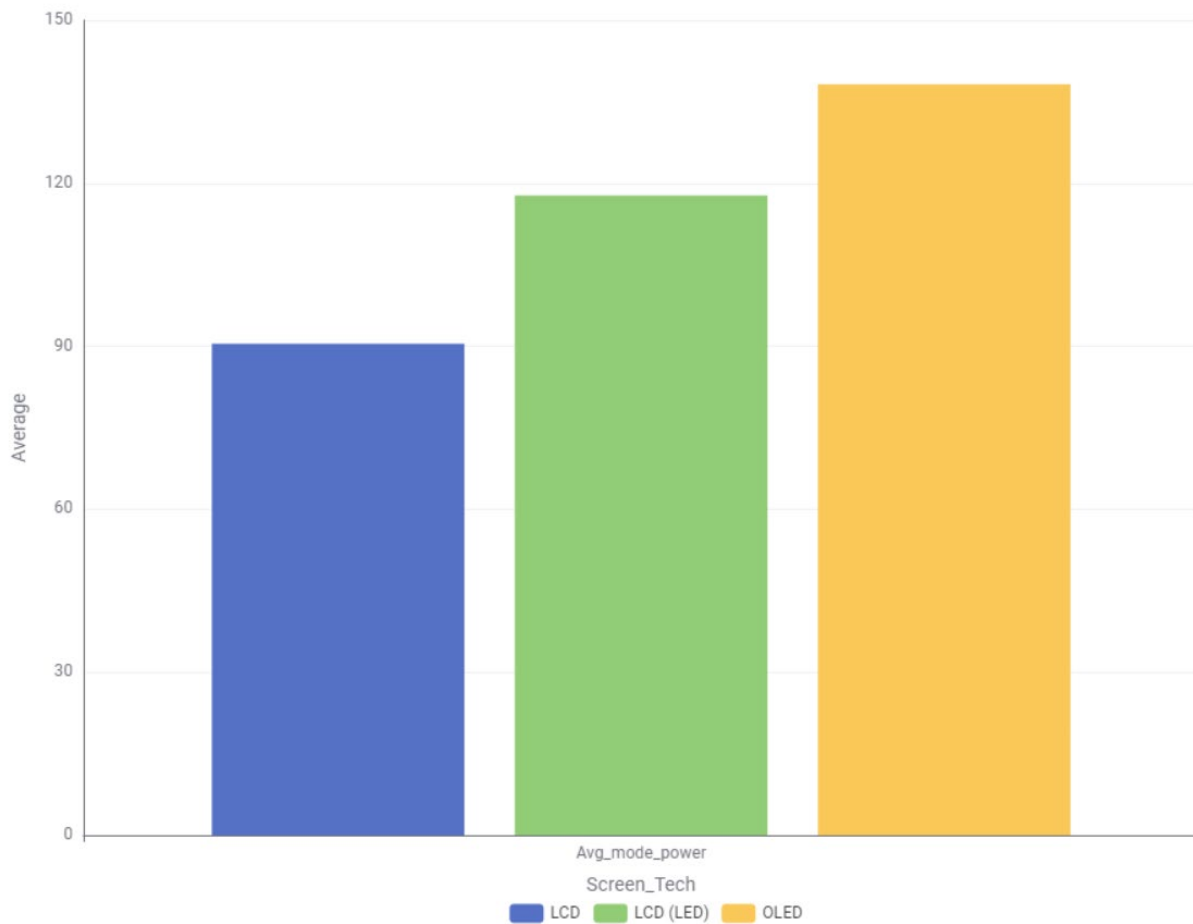


Bar showing  
avg power consumption

Box Plot



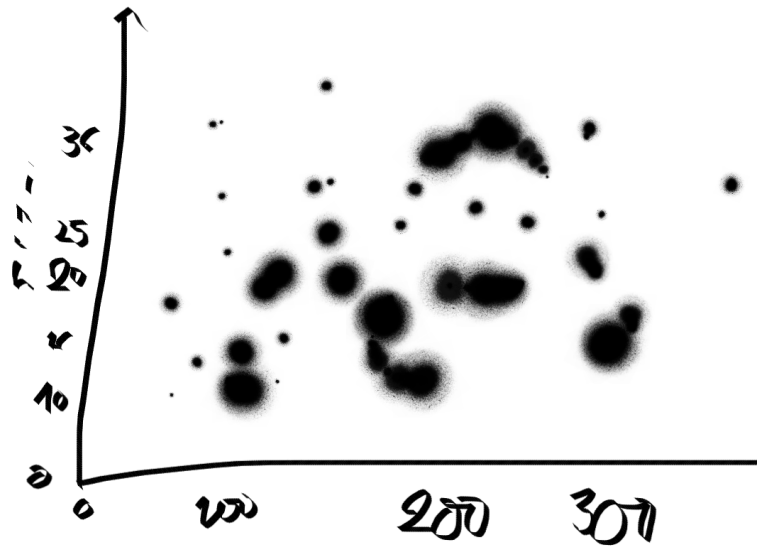
Bar Chart



## 5. What is the relationship between screen size and power use?

- **Data needed:**
  - screensize\_inch (numeric)
  - Avg\_mode\_power
- **Chart type:**
  - Scatter plot
- **Sketch of chart:**
  - X-axis: Screen size in inches
  - Y-axis: Power use (kWh)
  - Points scattered, upward trend visible
- **Data table sketch:**

| Screen size - inch | Avg power |
|--------------------|-----------|
| 10                 | 77        |
| 16                 | 97        |
| 20                 | 100       |
| 25                 | 101       |
| 30                 | 113       |
| ...                |           |



► 1: Group table Flow Variables

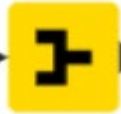
Rows: 1723 | Columns: 2

Table Statistics

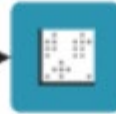
| <input type="checkbox"/> | # | RowID | Avg_mode_power<br><small>(#) Number (Float)</small> | <input checked="" type="checkbox"/> screensize_inch<br><small>(#) Number (Float)</small> |
|--------------------------|---|-------|---|--|
| <input type="checkbox"/> | 1 | Row0  | 13.3  | 16   |
| <input type="checkbox"/> | 2 | Row1  | 13.4  | 16   |
| <input type="checkbox"/> | 3 | Row2  | 14.61   | 19   |
| <input type="checkbox"/> | 4 | Row3  | 14.7  | 16   |

## Question 5

GroupBy

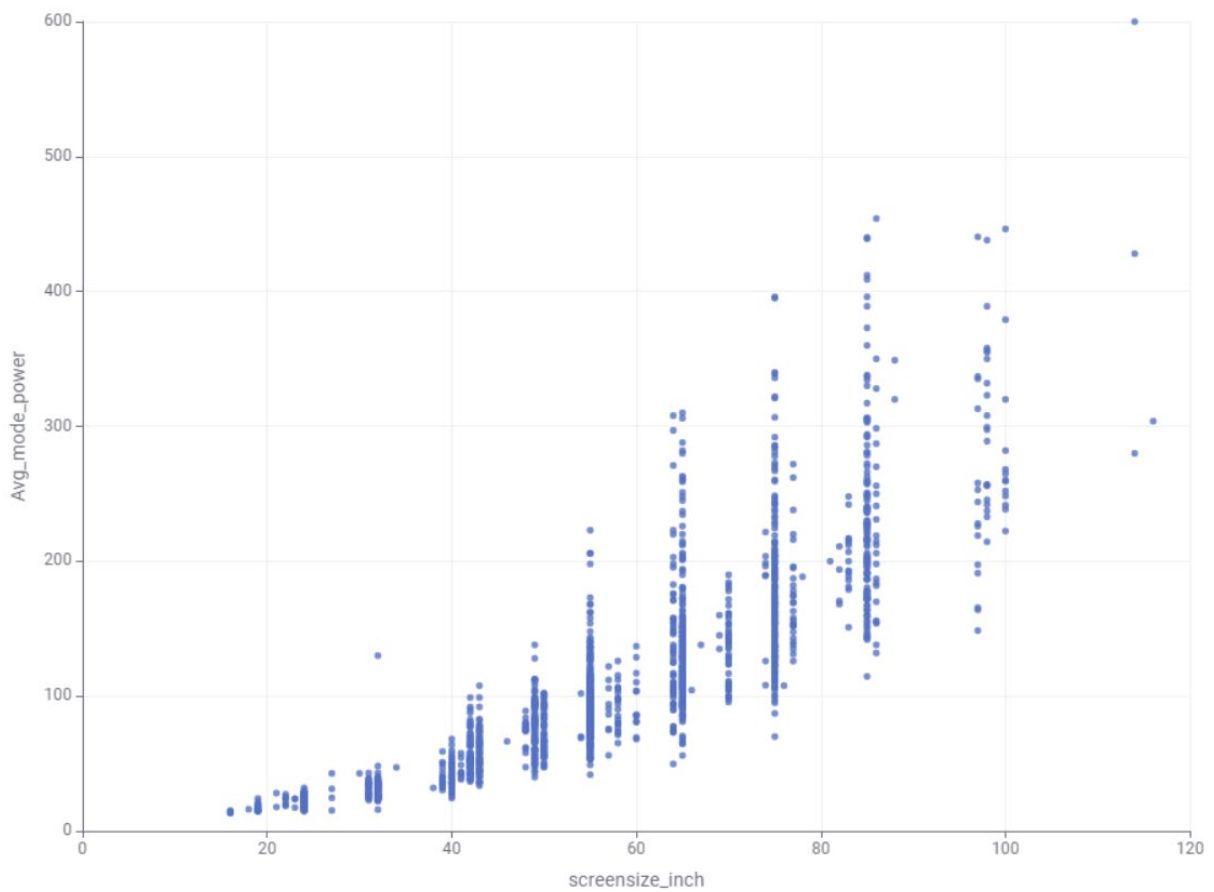


Scatter Plot



Group by  
"screen\_size\_inch"  
and "Avg\_mode\_power"

Scatter Plot



## 6. What is the relationship between star rating and screen size?

- **Data needed:**
  - Star (or Star Rating Index)
  - screensize\_inch (or category)
- **Chart type:**
  - **Box plot** → shows distribution of screen sizes for each star rating.
- **Sketch of chart:**
  - X-axis: Star rating (1★ to 6★)
  - Y-axis: Screen size (inches)
  - Boxes or bars per star rating
- **Data table sketch:**

| SR  | Screen - size inches |
|-----|----------------------|
| 1.0 | 2                    |
| 2.0 | 4                    |
| 3.0 | 7                    |
| 4.0 | 10                   |
| 5.0 | 36                   |

Box Plot



Bar chart





## 7. Are there differences in power consumption between brands?

- **Data needed:**

- Brand
- Average Avg\_mode\_power

- **Chart type:**

- **Bar chart (mean)** → compare average power by brand.
- **Box plot** if you want to show variation.

- **Sketch of chart:**

- X-axis: Brand
- Y-axis: Power consumption (watts)
- Bars or boxes

