GSheets Lecture 3 - Pivot Tables, Statistical Functions & Macros

Agenda

DAF

- Problem Statement I
  - Functions
    - Unique, Filter
  - Pivot Tables
    - Helper column, Calculated Fields, Pivot Filter, Slicers
  - Duplicate Row Deletion
  - Custom formatting of cell
  - Conditional formatting
    - Top/Bottom Rules, Highlight rules, Data Bars
  - Charts
    - Bar, Pie, Stacked Bar
  - Conclusion
  - Match Summary Analysis Demonstration
- Problem Statement II
  - Statistical Functions
    - Mean, Median, Mode, SD, Variance, Quartile, Min, Max
    - Box Plot, Histogram
- Problem Statement III
  - Macros in Google Sheets

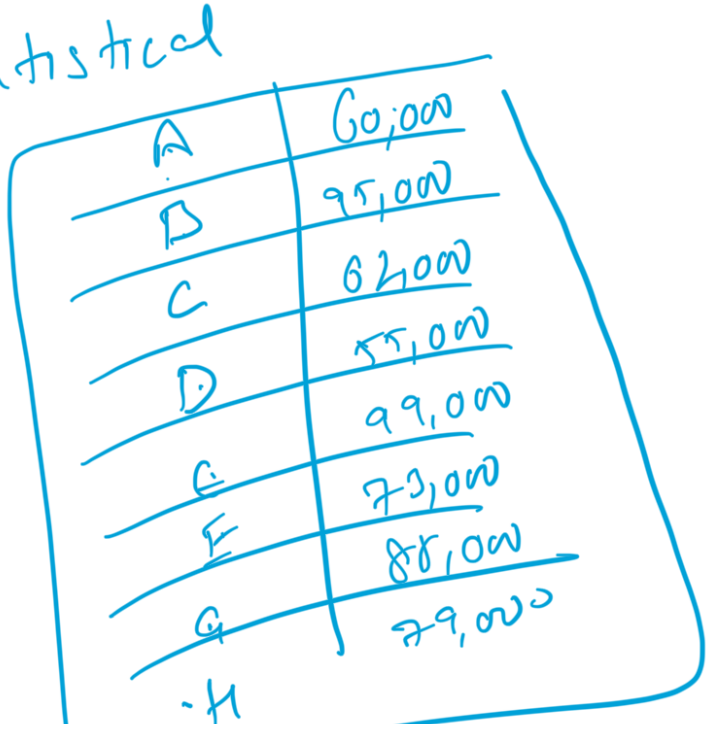

Song ?

Pivot tables

↳ It is way to quickly Summary large datasets by
  ↳ Grouping
  ↳ Aggregation
  ↳ filtering

↳ types of fields
  ↳ Value field
  ↳ Row field
  ↳ Column field
  ↳ Filter field

Statistical



(1) Mean (Avg) = $\frac{60+95+62+75+99+73+88+55}{8}$

(2) Median = Middle value

55, 60, 62, 73, 79, 88, 95, 99

$\left(\frac{n}{2}\right)^{th} + \left(\frac{n+2}{2}\right)^{th} / 2$

$\Rightarrow 4^{th} + 5^{th} / 2$

$\Rightarrow 73+79/2 = 76.00$

(3) Mode = Most frequent value

$\Rightarrow$ NO mode

(4) Standard Deviation (Std ev)

↳ measure of Spread

Avg = 76375

Deviation = $55000 - 76375 = -21,375$

$\Rightarrow 60000 - 76375 = -16,375$

$\Rightarrow 95000 - 76375 = 18,625$

$\sqrt{\quad}$

$\sqrt{\quad} / 7 \Rightarrow 16,183$

$\sqrt{(-21,375)}$ / +

Variance :

$$S = \frac{1}{n-1} \sum_{i=1}^{n} (x_i - \bar{x})^2$$

↳ mean = 76,375

↳ (Derivation from mean)^2 / n-1 ⇒ 7