

VISUALISASI DATA

Visualisasi Data Menggunakan Phyton

Magister Teknik Informatika

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- 01 **Mengapa Visualisasi?**
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- 02 **Mengenal Tipe Grafik**
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- 03 **Mengenal Library Visualisasi**
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- 04 **Hands-on: Visualisasi dengan Matplotlib**
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- 05 **Hands-on: Visualisasi dengan Seaborn**
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- 06 **Hands-on: Visualisasi dengan Plotly**
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Visualisasi Data dengan Pustaka Python



Mengapa visualisasi?

Komponen kunci dalam analisis data dan ilmu data karena membantu kita memahami, mengeksplorasi, dan menyampaikan informasi yang terkandung dalam data secara efektif

Fungsi visualisasi

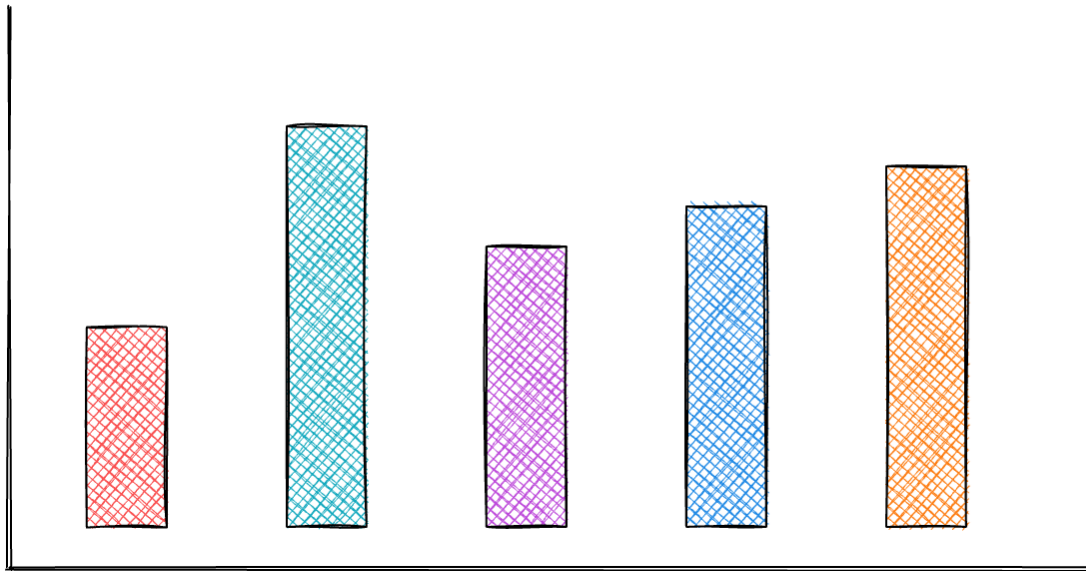
- ❖ Memahami Data dengan Lebih Baik
- ❖ Menemukan Pola dan Tren
- ❖ Komunikasi yang Efektif
- ❖ Mendukung Pengambilan Keputusan
- ❖ Memvalidasi Model dan Hipotesis
- ❖ Mengidentifikasi Outliers dan Anomali
- ❖ Meningkatkan Keterlibatan Pengguna

Berbagai Jenis Grafik

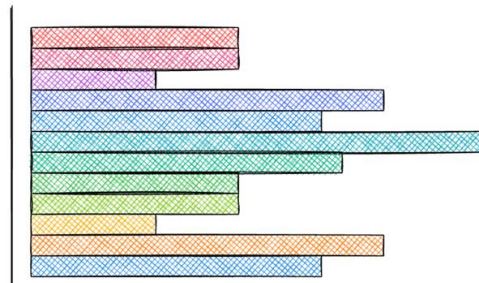
- ❖ Bar chart
- ❖ Line chart
- ❖ Scatter Plot
- ❖ Pie Chart
- ❖ Histogram
- ❖ Box Plot
- ❖ Heatmap

Bar Chart

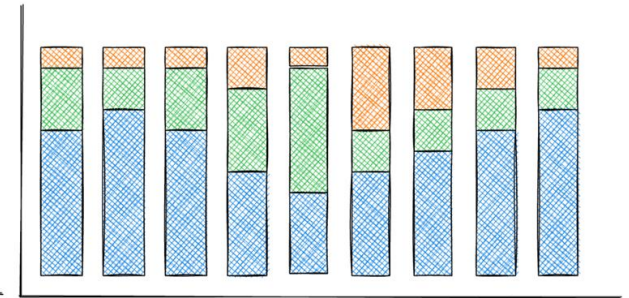
Column



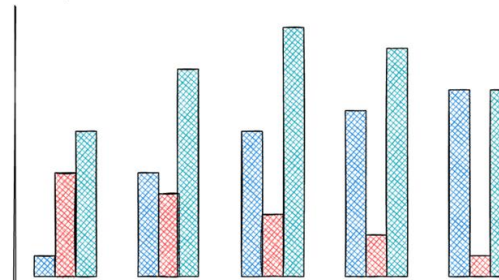
Bar



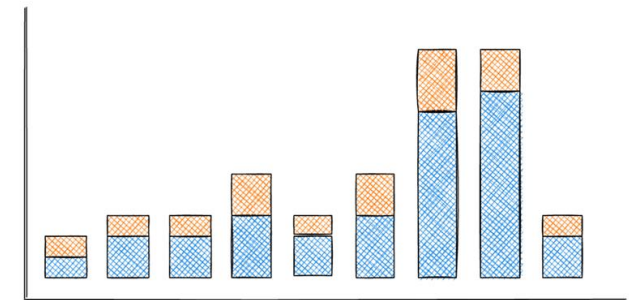
100% Stacked Column

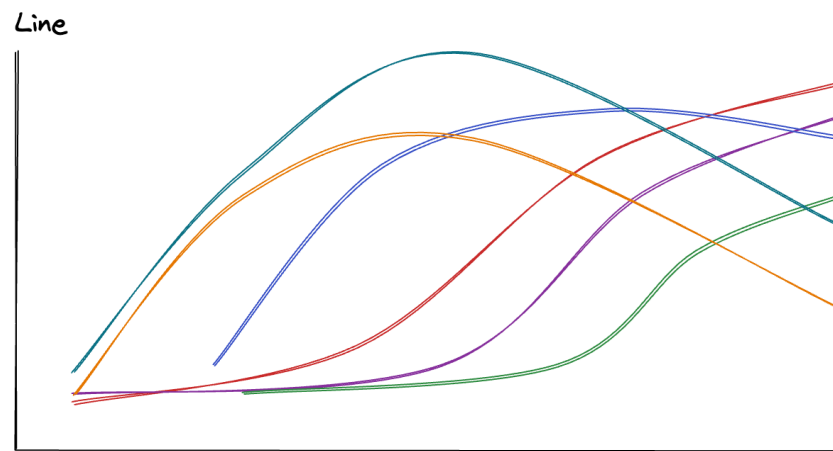
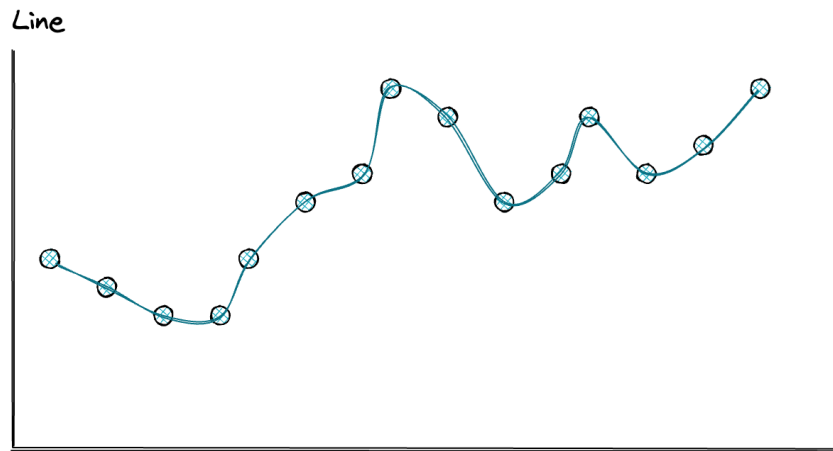


Grouped Column



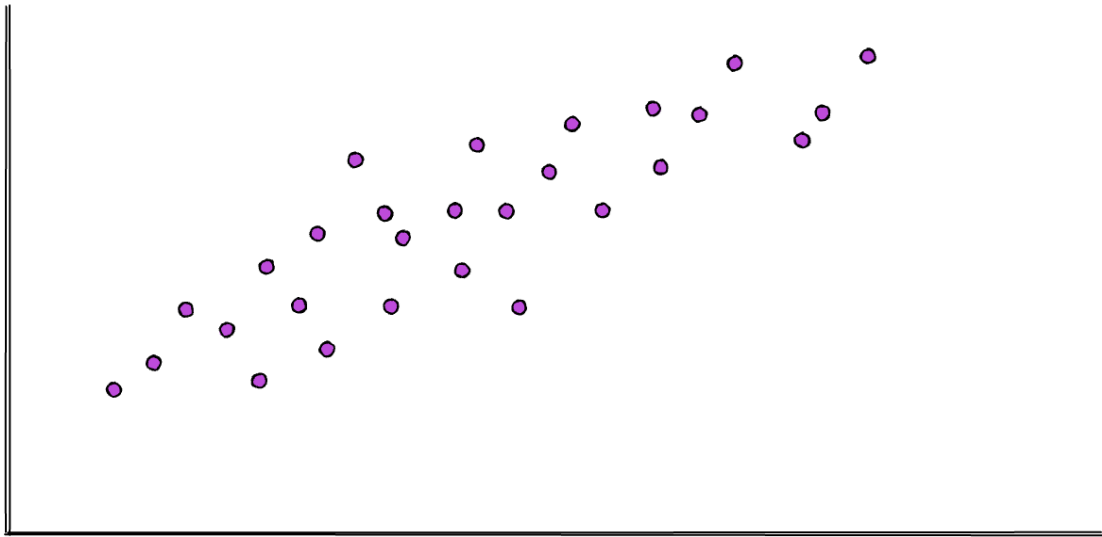
Stacked Column





Line Chart

Scatter

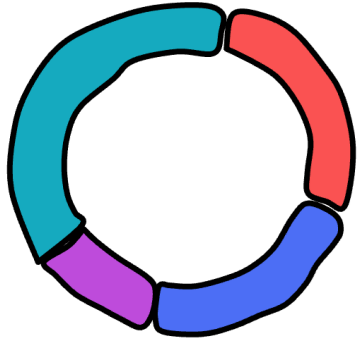


Scatter Plot

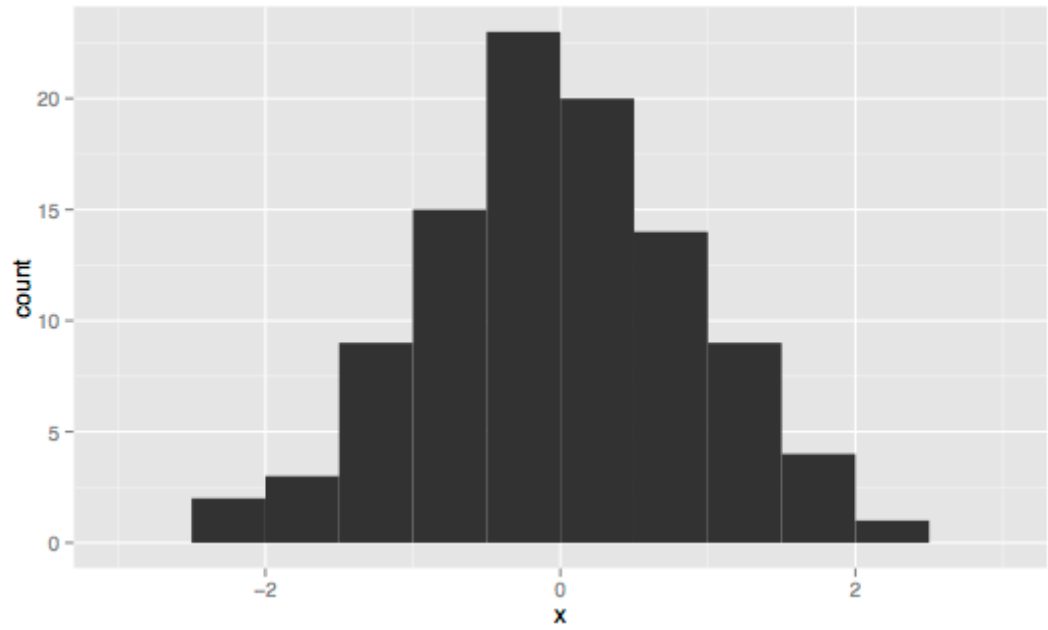
Pie



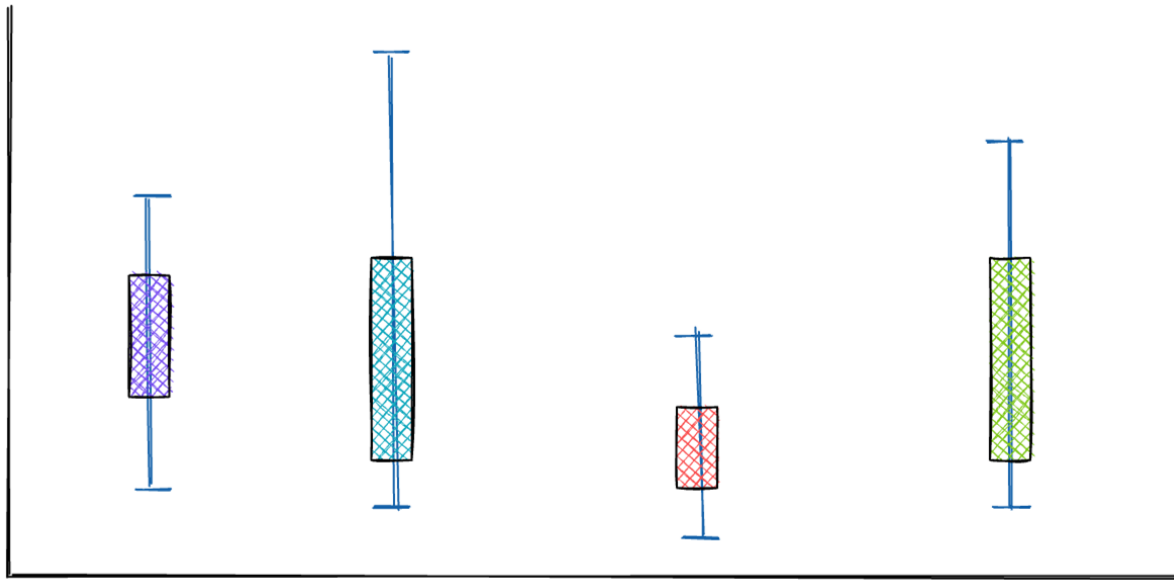
Donut



Pie Chart

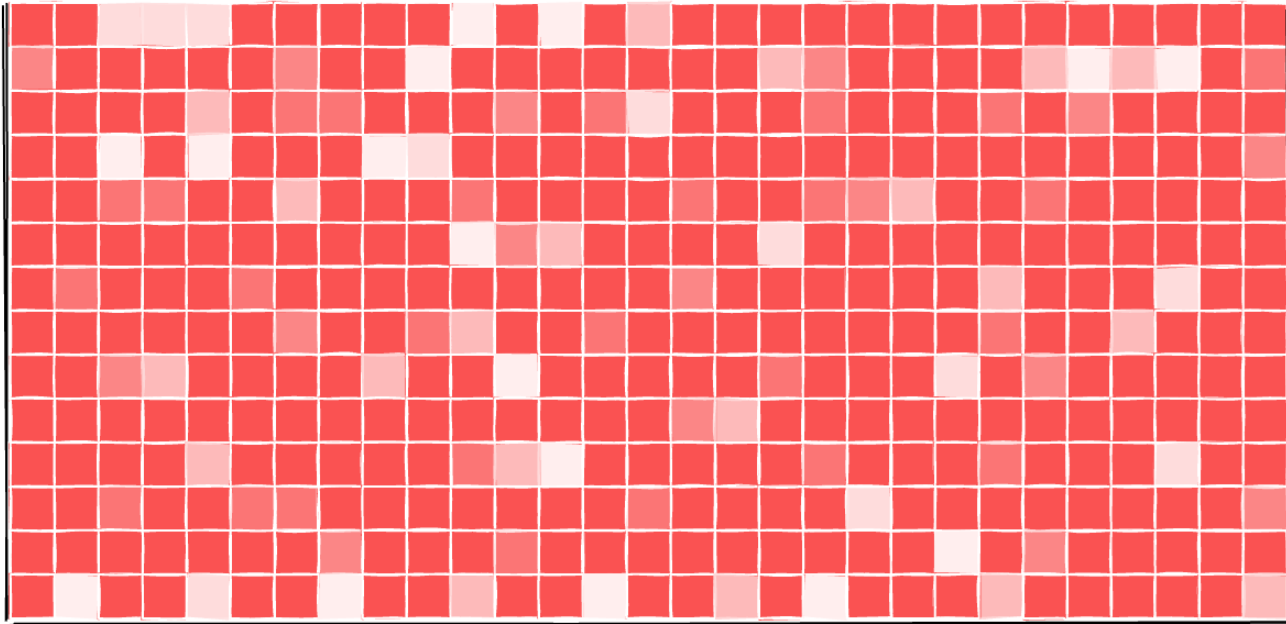


Histogram



Boxplot

Cartiesan heatmap



Heatmap

- ❖ Matplotlib
- ❖ Seaborn
- ❖ Plotly
- ❖ Bokeh
- ❖ Altair
- ❖ ggplot (Plotnine)
- ❖ Pandas Plotting

Berbagai Library Visualisasi

Terimakasih