

EIE5023

# ALGORITMA DAN STRUKTUR DATA + PRAK

14

ENDANG SRI RAHAYU



FTI

TEKNIK  
ELEKTRO



Outlines:

## **PENGELOLAAN DATA:**

- Membaca Data (txt, CSV, xlsx)
- Visualisasi Data

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## **ALGORITMA DAN STRUKTUR DATA**



# DATA siap dibaca

```
[ ] from google.colab import files  
    uploaded = files.upload()
```

# BACA FILE MS EXCELL

```
▶ import pandas as pd

# Membaca file Excel
df = pd.read_excel('data.xlsx', sheet_name='Sheet1') # Anda bisa ganti nama sheet

print(df.head())
```

```
▶ import pandas as pd

# Ganti 'namafile.xlsx' dengan nama file Excel kamu
file_path = 'namafile.xlsx'

# Membaca seluruh isi sheet pertama
df = pd.read_excel(file_path)

# Menampilkan 5 baris pertama
print(df.head())
```

# BACA FILE CSV

```
▶ import pandas as pd

# Membaca file CSV
df = pd.read_csv('data.csv')

# Menampilkan 5 baris pertama
print(df.head())
```

```
[ ] import os

file_path = 'data.csv'

if os.path.exists(file_path):
    df = pd.read_csv(file_path)
    print(df.head())
else:
    print(f"File '{file_path}' tidak ditemukan.")
```

# BACA FILE TXT

```
▶ # Membaca file teks baris per baris
with open('data.txt', 'r') as file:
    for line in file:
        print(line.strip())
```

```
[ ] import pandas as pd

# Membaca file
df = pd.read_csv('data.txt', sep='\t', header=None)

# Menampilkan jumlah baris
print("Jumlah baris:", df.shape[0])
```

# VISUALISASI DATA

```
▶ import pandas as pd
import matplotlib.pyplot as plt

# Baca file Excel
df = pd.read_excel('penjualan.xlsx')

# Tampilkan isi data
print(df)

# Buat grafik garis (line chart)
plt.figure(figsize=(8, 5))
plt.plot(df['Bulan'], df['Penjualan'], marker='o')
plt.title('Grafik Penjualan per Bulan')
plt.xlabel('Bulan')
plt.ylabel('Jumlah Penjualan')
plt.grid(True)
plt.tight_layout()
plt.show()
```

PRAKTIK:

GANTI plt.plot() dengan plt.bar().

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# TERIMA KASIH

Next ---- PERTEMUAN ke-15



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