

```
In [4]: import pandas as pd
import numpy as np
import matplotlib.pyplot as plt

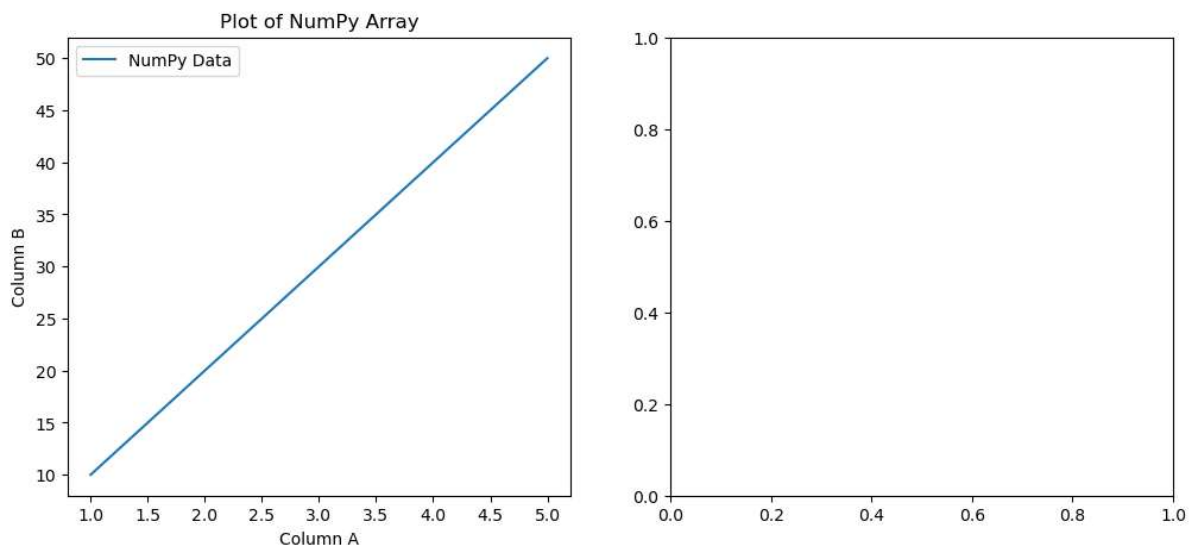
# Creating a DataFrame from a dictionary
data = {'A': [1, 2, 3, 4, 5], 'B': [10, 20, 30, 40, 50]}
df = pd.DataFrame(data)

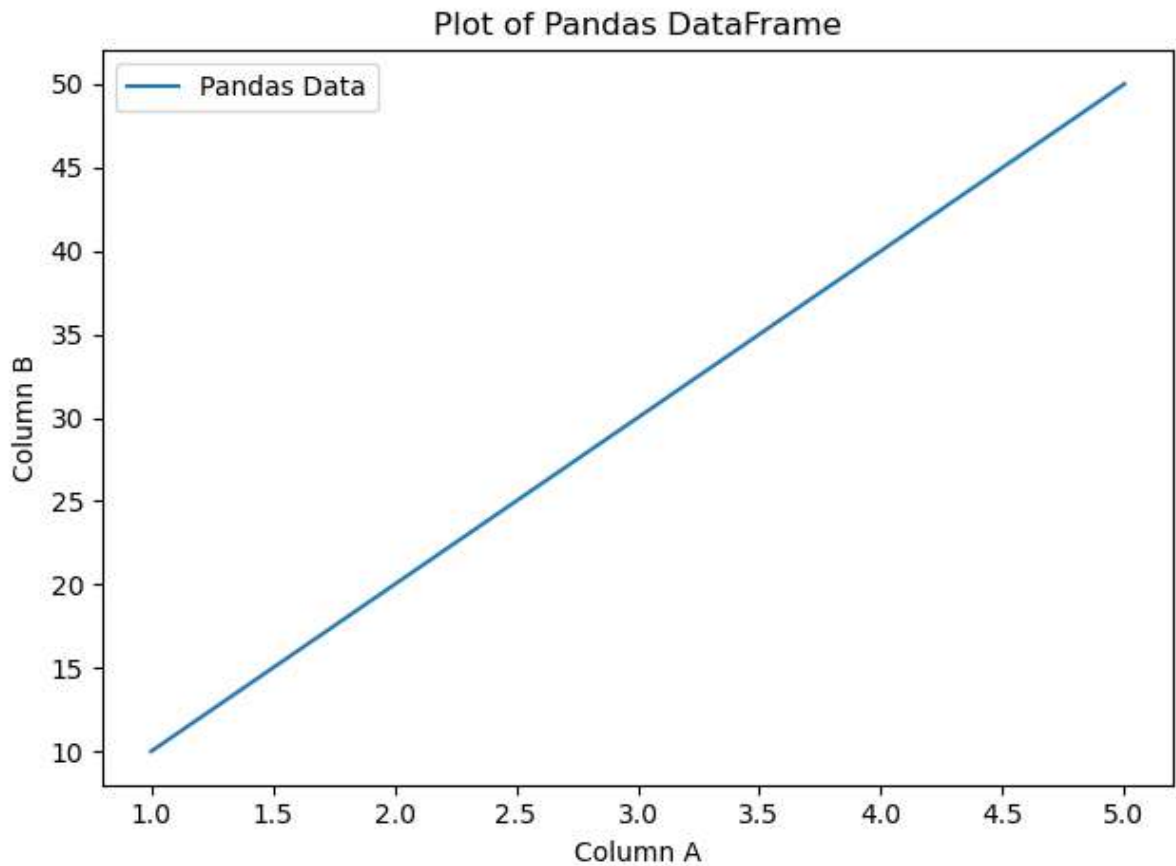
# Convert the DataFrame to a NumPy array
numpy_array = df.to_numpy()

# Plot the NumPy array using Matplotlib
plt.figure(figsize=(12, 5))
plt.subplot(1, 2, 1) # Create subplots
plt.plot(numpy_array[:, 0], numpy_array[:, 1], label='NumPy Data')
plt.xlabel('Column A')
plt.ylabel('Column B')
plt.title('Plot of NumPy Array')
plt.legend()

# Plot the DataFrame using pandas
plt.subplot(1, 2, 2) # Create subplots
df.plot(x='A', y='B', kind='line', label='Pandas Data')
plt.xlabel('Column A')
plt.ylabel('Column B')
plt.title('Plot of Pandas DataFrame')
plt.legend()

plt.tight_layout() # Ensure proper spacing
plt.show()
```





```
In [2]: import pandas as pd
import numpy as np
import matplotlib.pyplot as plt

# Creating a DataFrame from a dictionary
data = {'A': [1, 2, 3, 4, 5], 'B': [10, 20, 30, 40, 50]}
df = pd.DataFrame(data)

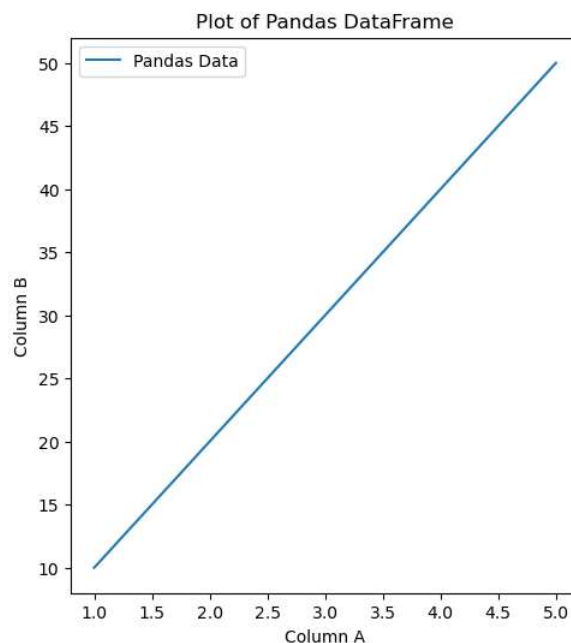
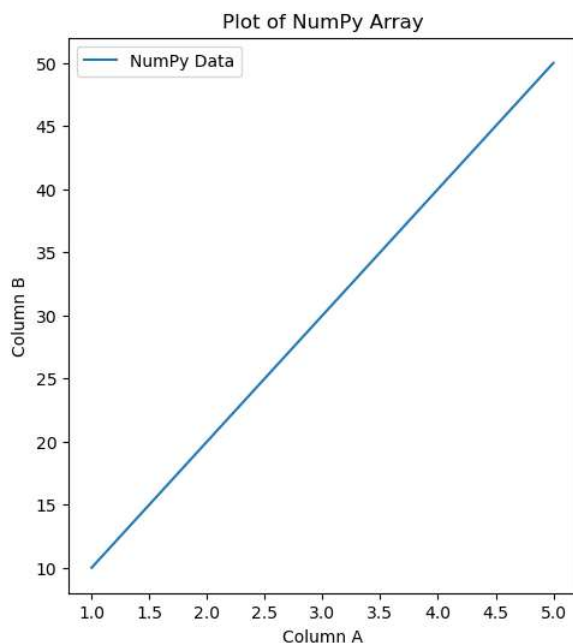
# Convert the DataFrame to a NumPy array
numpy_array = df.to_numpy()

# Create a figure and axis for the plots
fig, (ax1, ax2) = plt.subplots(1, 2, figsize=(12, 6))

# Plot the NumPy array
ax1.plot(numpy_array[:, 0], numpy_array[:, 1], label='NumPy Data')
ax1.set_xlabel('Column A')
ax1.set_ylabel('Column B')
ax1.set_title('Plot of NumPy Array')
ax1.legend()

# Plot the Pandas DataFrame
df.plot(x='A', y='B', kind='line', label='Pandas Data', ax=ax2)
ax2.set_xlabel('Column A')
ax2.set_ylabel('Column B')
ax2.set_title('Plot of Pandas DataFrame')
ax2.legend()

# Display the plots
plt.show()
```



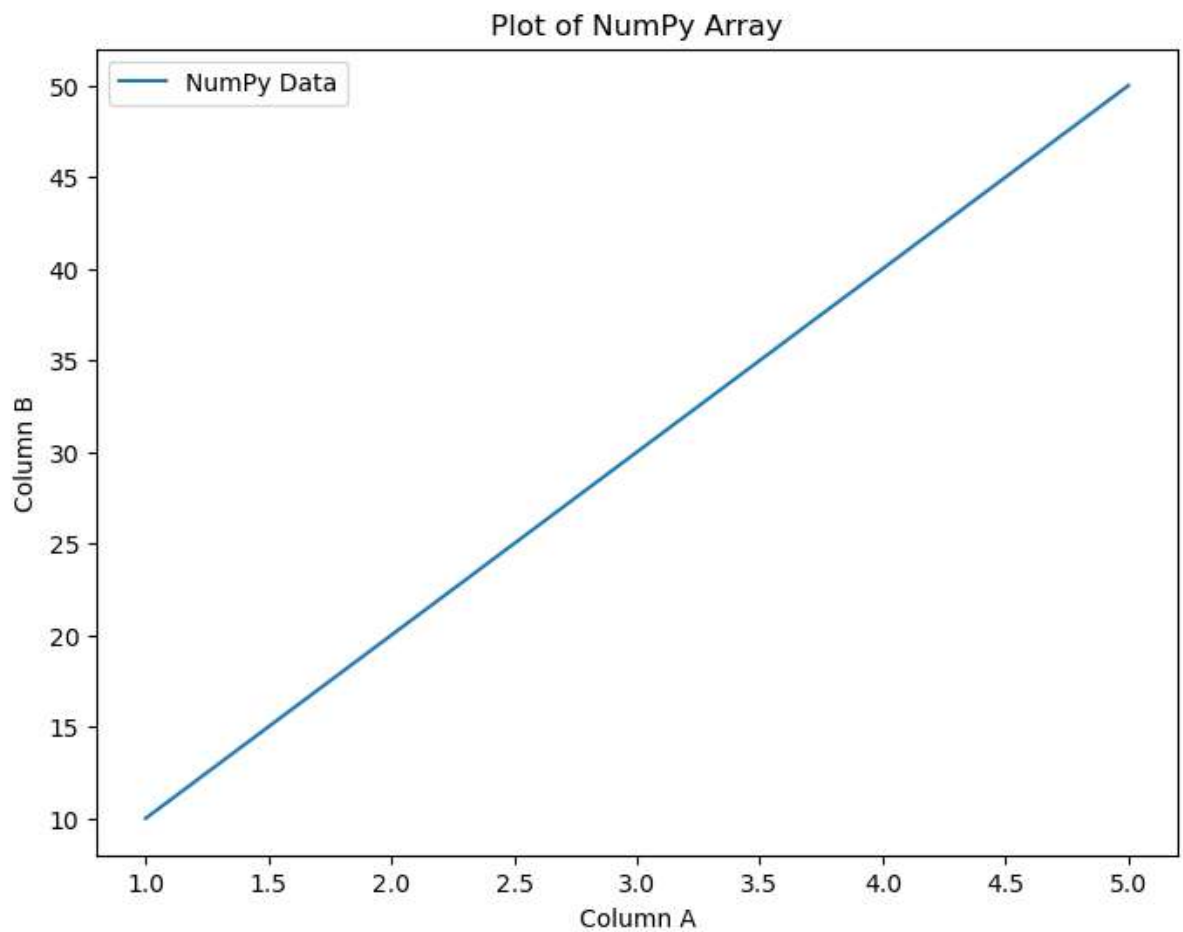
```
In [1]: import pandas as pd
import numpy as np
import matplotlib.pyplot as plt

# Creating a DataFrame from a dictionary
data = {'A': [1, 2, 3, 4, 5], 'B': [10, 20, 30, 40, 50]}
df = pd.DataFrame(data)

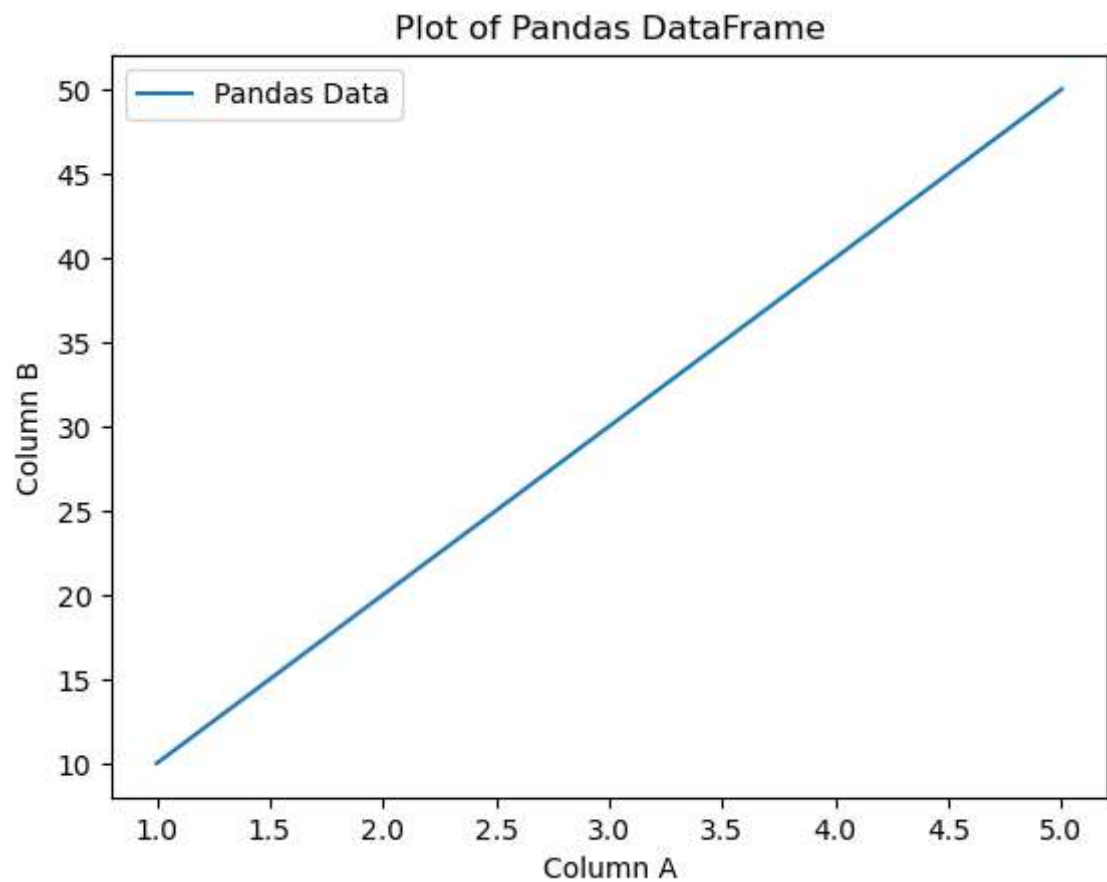
# Convert the DataFrame to a NumPy array
numpy_array = df.to_numpy()

# Plot the data set in NumPy
plt.figure(figsize=(8, 6))
plt.plot(numpy_array[:, 0], numpy_array[:, 1], label='NumPy Data')
plt.xlabel('Column A')
plt.ylabel('Column B')
plt.title('Plot of NumPy Array')
plt.legend()
plt.show()

# Plot the data set in Pandas
plt.figure(figsize=(8, 6))
df.plot(x='A', y='B', kind='line', label='Pandas Data')
plt.xlabel('Column A')
plt.ylabel('Column B')
plt.title('Plot of Pandas DataFrame')
plt.legend()
plt.show()
```



<Figure size 800x600 with 0 Axes>



```
In [6]: import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
```

```
# Creating a DataFrame from a dictionary
data = {'A': [1, 2, 3, 4, 5], 'B': [10, 20, 30, 40, 50]}
df = pd.DataFrame(data)

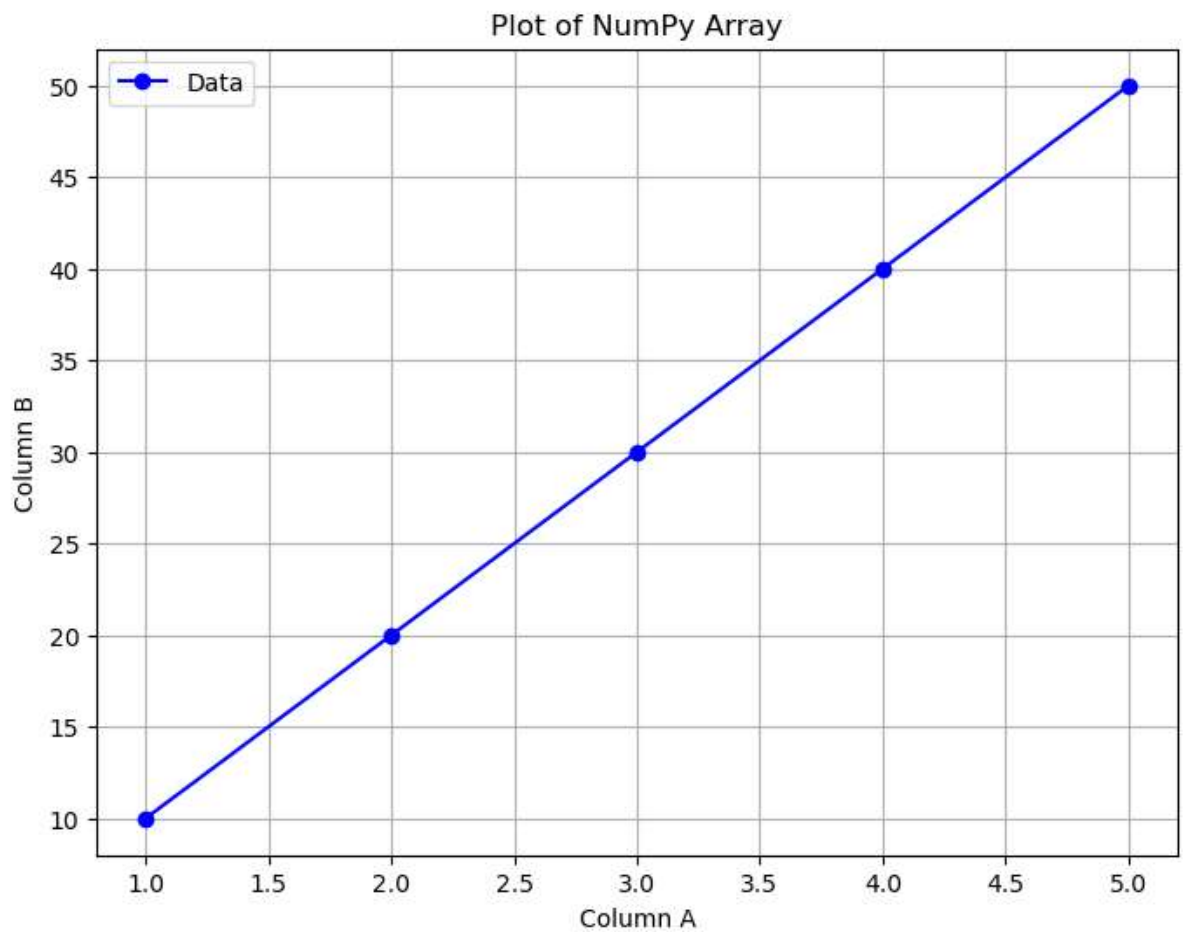
# Convert the DataFrame to a NumPy array
numpy_array = df.to_numpy()

# Specify plot settings
plot_settings = {
    'label': 'Data',
    'linestyle': '-',
    'marker': 'o',
    'color': 'b',
}

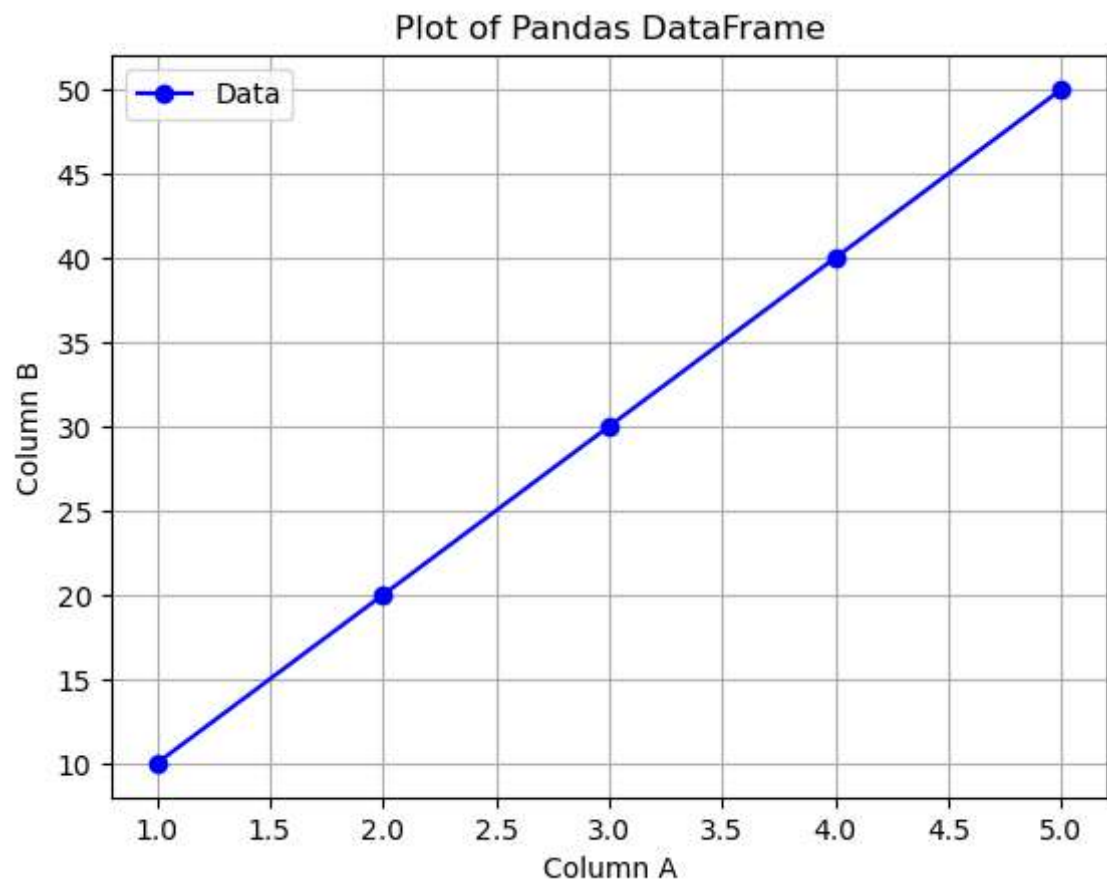
# Plot the data set in NumPy
plt.figure(figsize=(8, 6))
plt.plot(numpy_array[:, 0], numpy_array[:, 1], **plot_settings)
plt.xlabel('Column A')
plt.ylabel('Column B')
plt.title('Plot of NumPy Array')
plt.legend()
plt.grid(True)

# Plot the data set in Pandas
plt.figure(figsize=(8, 6))
df.plot(x='A', y='B', kind='line', **plot_settings)
plt.xlabel('Column A')
plt.ylabel('Column B')
plt.title('Plot of Pandas DataFrame')
plt.legend()
plt.grid(True)

# Show the plots
plt.show()
```



<Figure size 800x600 with 0 Axes>



```
In [9]: import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
```

```

# Creating a DataFrame from a dictionary
data = {'A': [1, 2, 3, 4, 5], 'B': [10, 20, 30, 40, 50]}
df = pd.DataFrame(data)

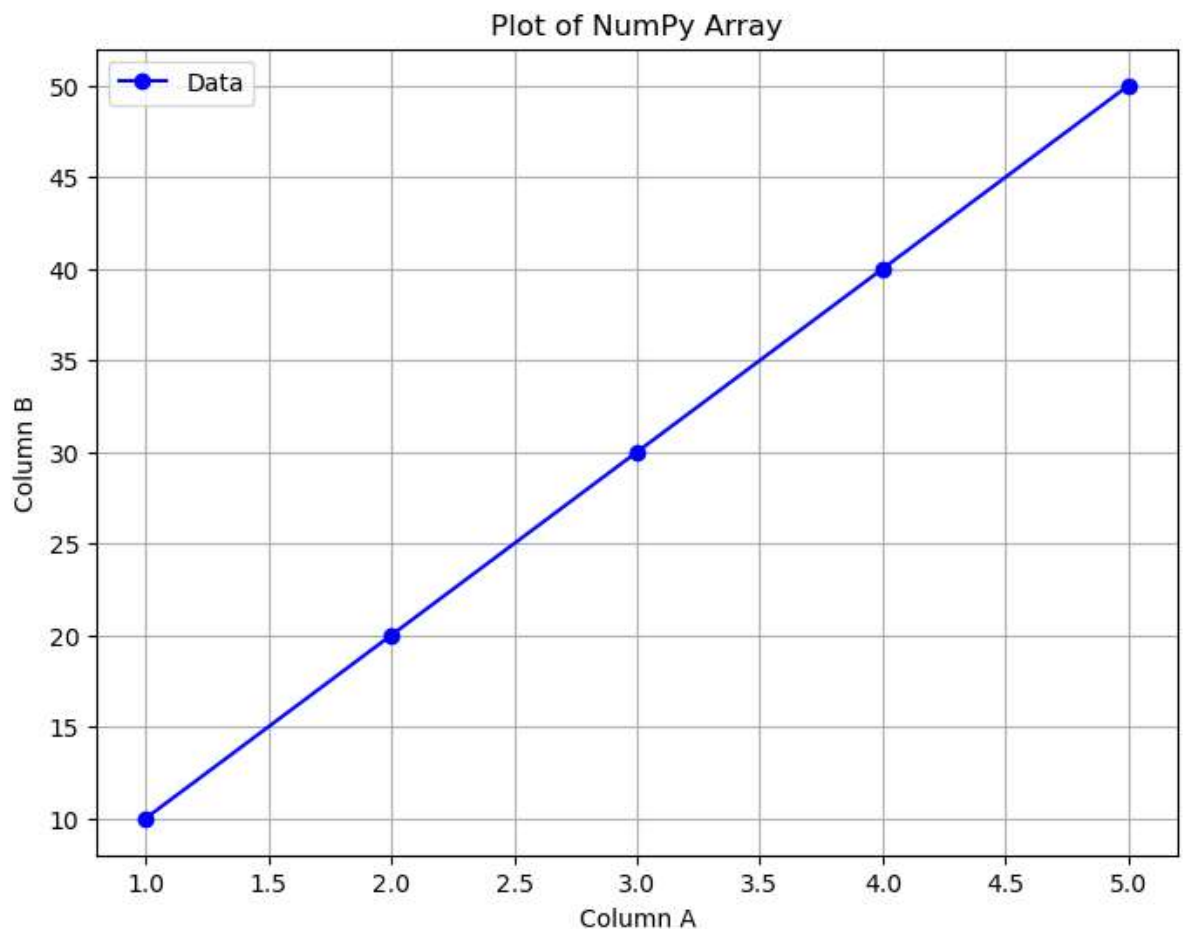
# Convert the DataFrame to a NumPy array
numpy_array = df.to_numpy()

# Specify plot settings
line_style = '-'
line_color = 'blue'
marker = 'o'

# Plot the data set in NumPy with specified settings
plt.figure(figsize=(8, 6))
plt.plot(numpy_array[:, 0], numpy_array[:, 1], linestyle=line_style, color=line_color, marker=marker)
plt.xlabel('Column A')
plt.ylabel('Column B')
plt.title('Plot of NumPy Array')
plt.legend()
plt.grid(True)
plt.show()

# Plot the data set in Pandas with the same settings
plt.figure(figsize=(8, 6))
df.plot(x='A', y='B', kind='line', linestyle=line_style, color=line_color, marker=marker)
plt.xlabel('Column A')
plt.ylabel('Column B')
plt.title('Plot of Pandas DataFrame')

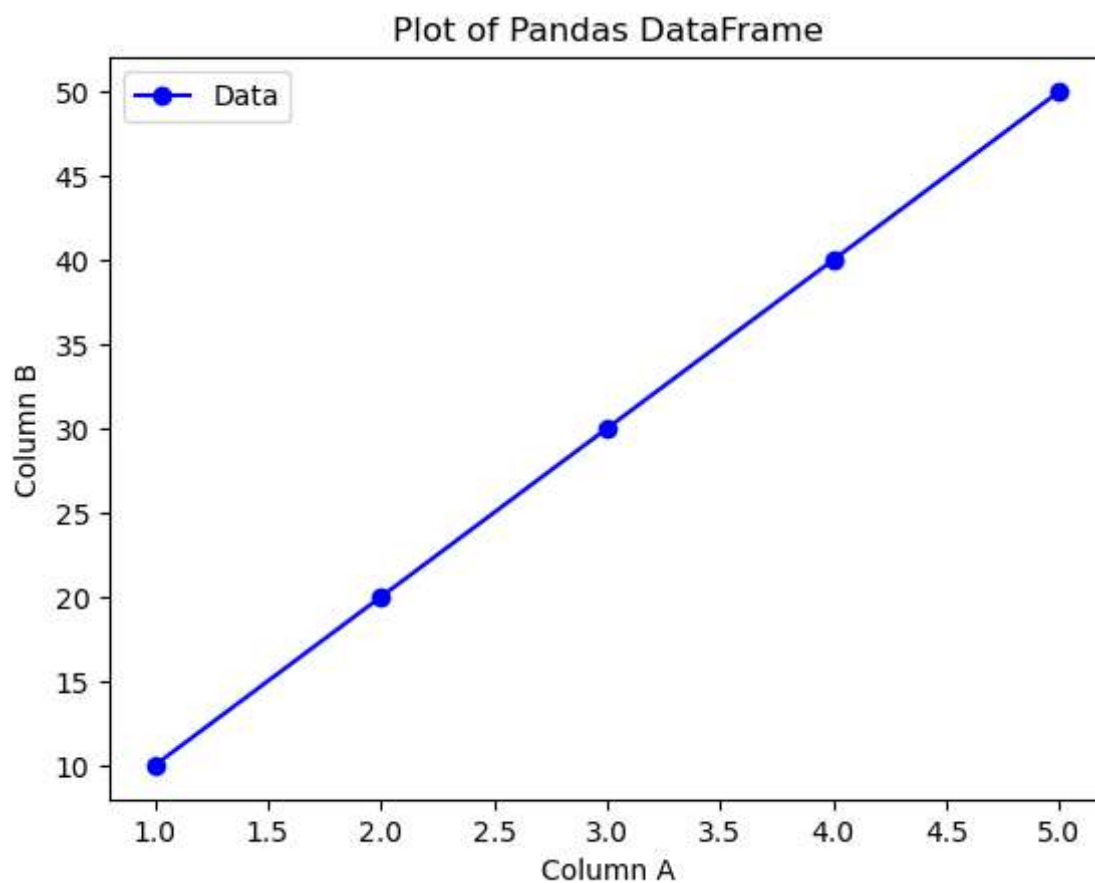
```



```

Out[9]: Text(0.5, 1.0, 'Plot of Pandas DataFrame')
<Figure size 800x600 with 0 Axes>

```



In []: