

Matplotlib 05_Belajar Bar Plot

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0.1 Bar Plot / Bar Chart

Dalam sesi ini kita akan mempelajari cara membuat bar plot dengan Matplotlib

```
[1]: %matplotlib inline
```

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

print(matplotlib.__version__)
print(np.__version__)
```

3.3.4

1.20.1

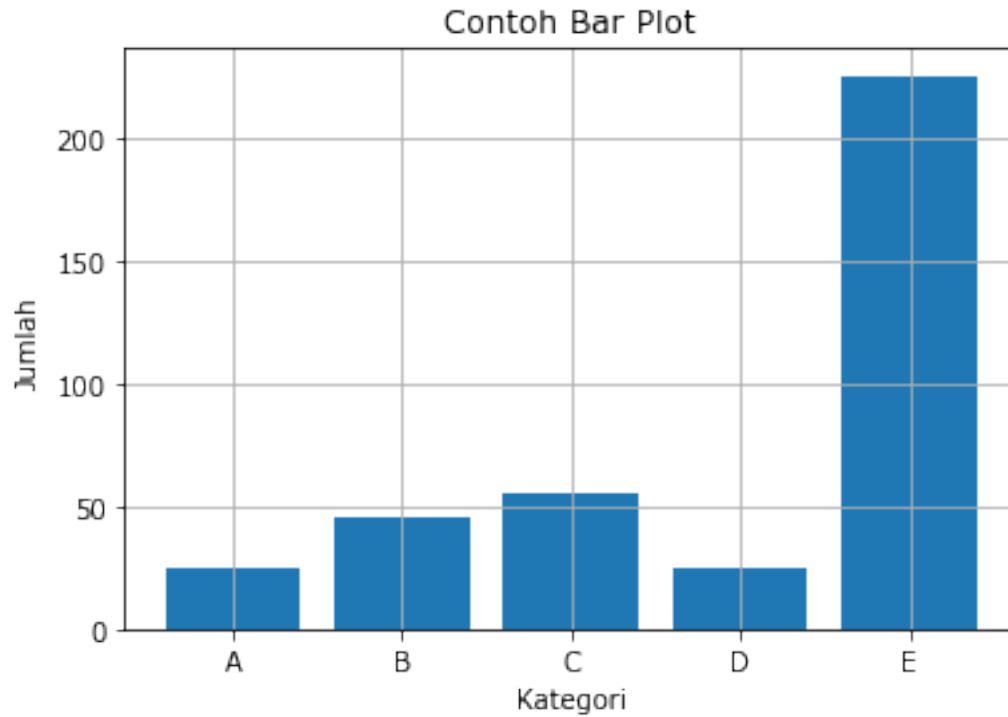
0.2 1. Simple Bar Plot

```
[3]: data = [25, 45, 55, 25, 225]
kategori = ['A', 'B', 'C', 'D', 'E']
```

```
[4]: plt.bar(kategori, data)
plt.grid()

plt.xlabel('Kategori')
plt.ylabel('Jumlah')
plt.title('Contoh Bar Plot')

plt.show()
```



0.3 2. Pengaturan Grid dan Color

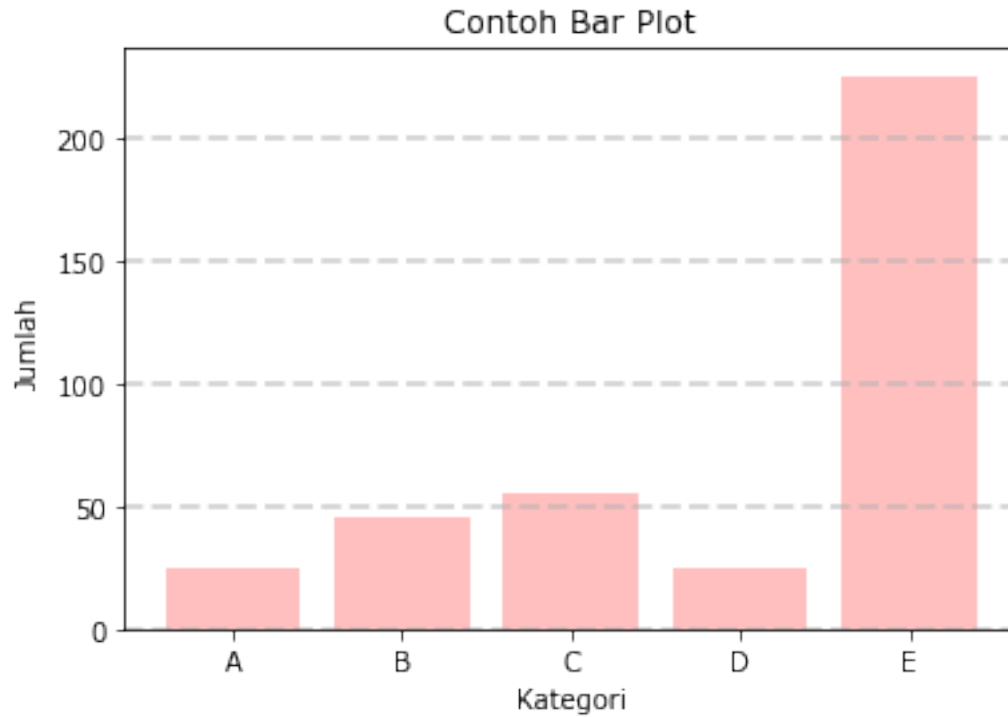
```
[5]: data = [25, 45, 55, 25, 225]
      kategori = ['A', 'B', 'C', 'D', 'E']
```

```
[6]: plt.bar(kategori,
             data,
             color='red',
             alpha=0.25)

plt.grid(linestyle='--',
        linewidth=2,
        axis='y', # Pilihan x, y, both
        alpha=0.50)

plt.xlabel('Kategori')
plt.ylabel('Jumlah')
plt.title('Contoh Bar Plot')

plt.show()
```



0.4 3. Horizontal Bar Plot

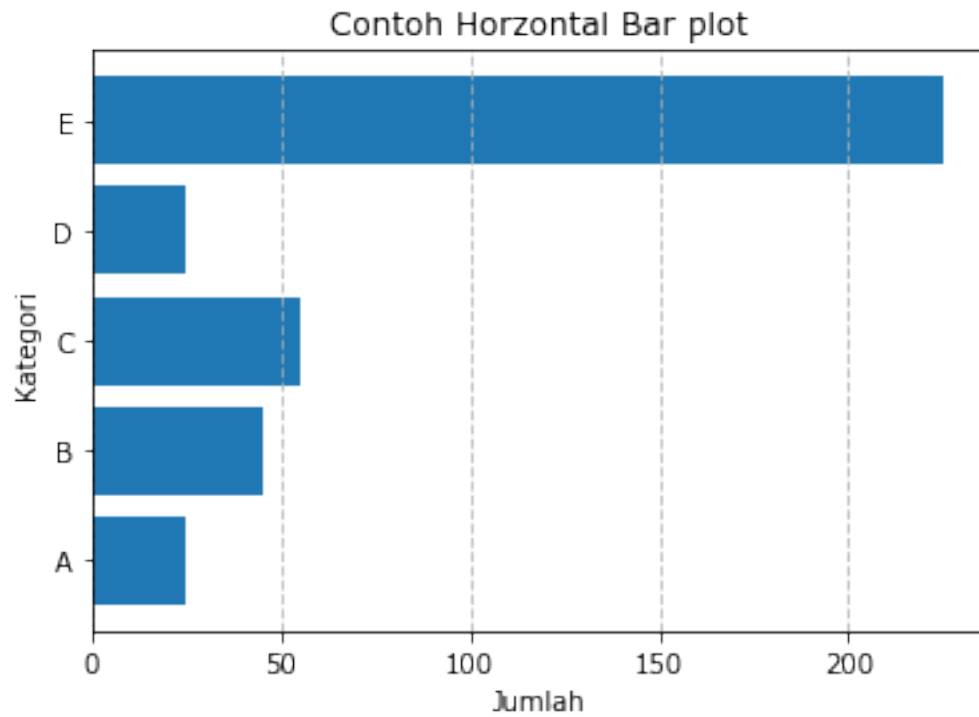
```
[7]: data = [25, 45, 55, 25, 225]
    kategori = ['A', 'B', 'C', 'D', 'E']

[8]: plt.barh(kategori, data)

    plt.grid(linestyle='--',
              linewidth=1,
              axis='x',
              alpha=0.75)

    plt.xlabel('Jumlah')
    plt.ylabel('Kategori')
    plt.title('Contoh Horizontal Bar plot')

    plt.show()
```

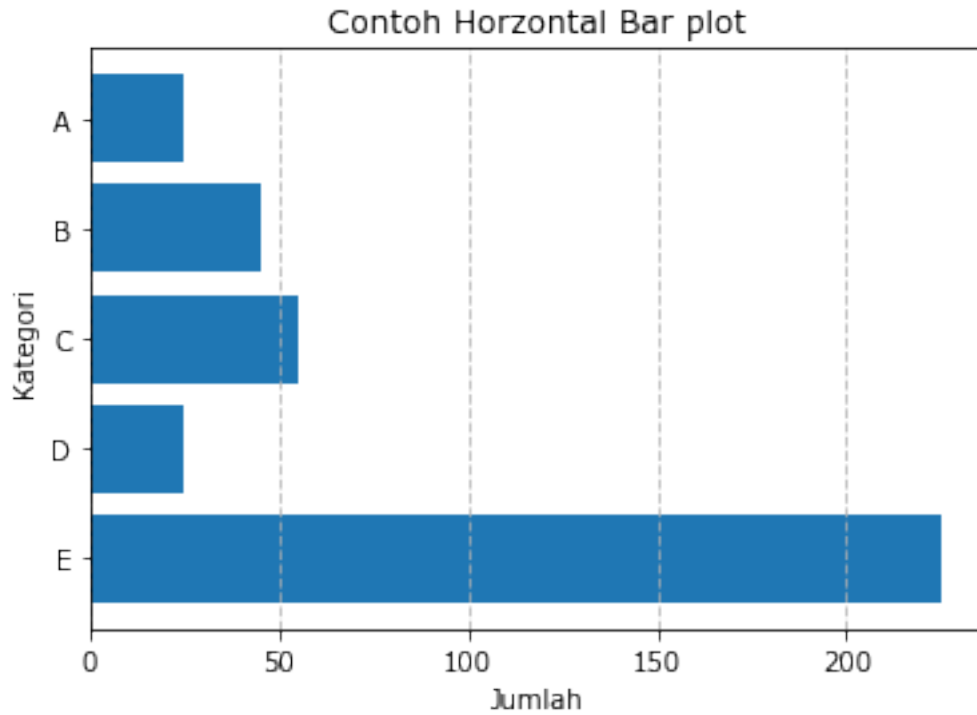


```
[9]: # Membalikkan urutan
plt.barh(kategori[::-1], data[::-1])

plt.grid(linestyle='--',
         linewidth=1,
         axis='x',
         alpha=0.75)

plt.xlabel('Jumlah')
plt.ylabel('Kategori')
plt.title('Contoh Horizontal Bar plot')

plt.show()
```



0.5 4. Stacked Bar Plot

```
[10]: data1 = [25, 85, 75, 40, 60]
      data2 = [40, 35, 20, 55, 10]
      kategori = ['A', 'B', 'C', 'D', 'E']
```

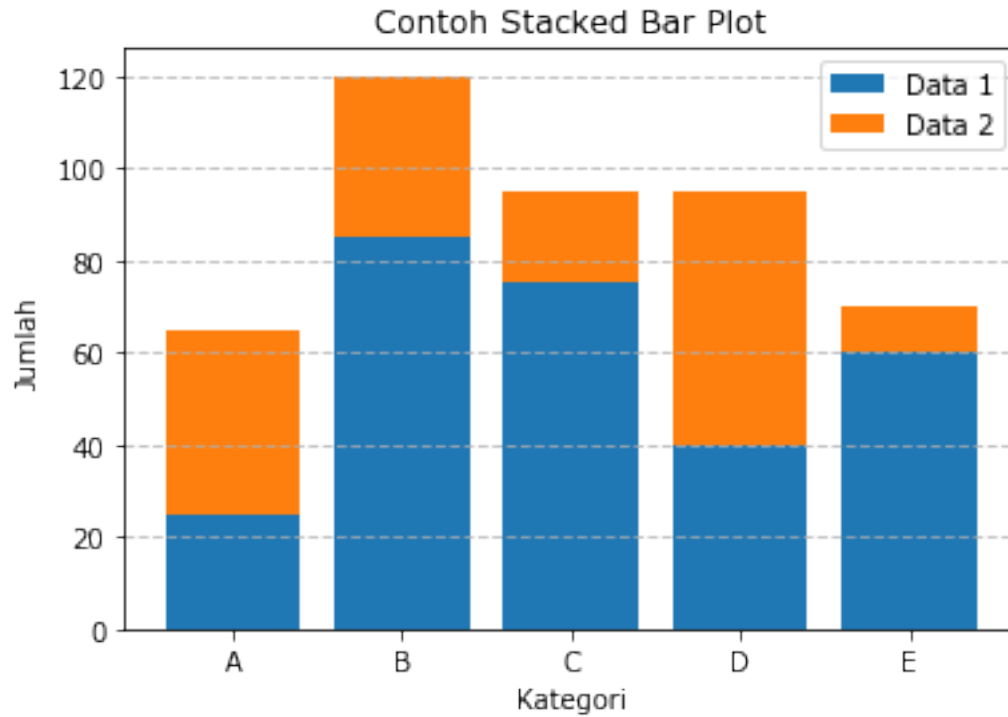
```
[11]: plt.bar(kategori, data1, label='Data 1')
      plt.bar(kategori, data2, label='Data 2', bottom=data1)

      plt.legend()

      plt.grid(linestyle='--',
                linewidth=1,
                axis='y',
                alpha=0.75)

      plt.xlabel('Kategori')
      plt.ylabel('Jumlah')
      plt.title('Contoh Stacked Bar Plot')

      plt.show()
```



0.6 5. Grouped Bar Plot

```
[12]: data1 = [25, 85, 75, 40, 60]
      data2 = [40, 35, 20, 55, 10]

      x = np.arange(len(kategori))
      x
```

```
[12]: array([0, 1, 2, 3, 4])
```

```
[13]: width = 0.35

      plt.bar(x-width/2, data1, width, label='Data 1')
      plt.bar(x+width/2, data2, width, label='Data 2')

      plt.xticks(x, kategori) # mengubah dari x ke kategori pada tampilan

      plt.grid(linestyle='--',
                linewidth=1,
                axis='y',
                alpha=0.75)

      plt.xlabel('Kategori')
```

```
plt.ylabel('Jumlah')  
plt.title('Contoh Grouped Bar Plot')  
  
plt.show()
```

