

# histogram

March 20, 2025

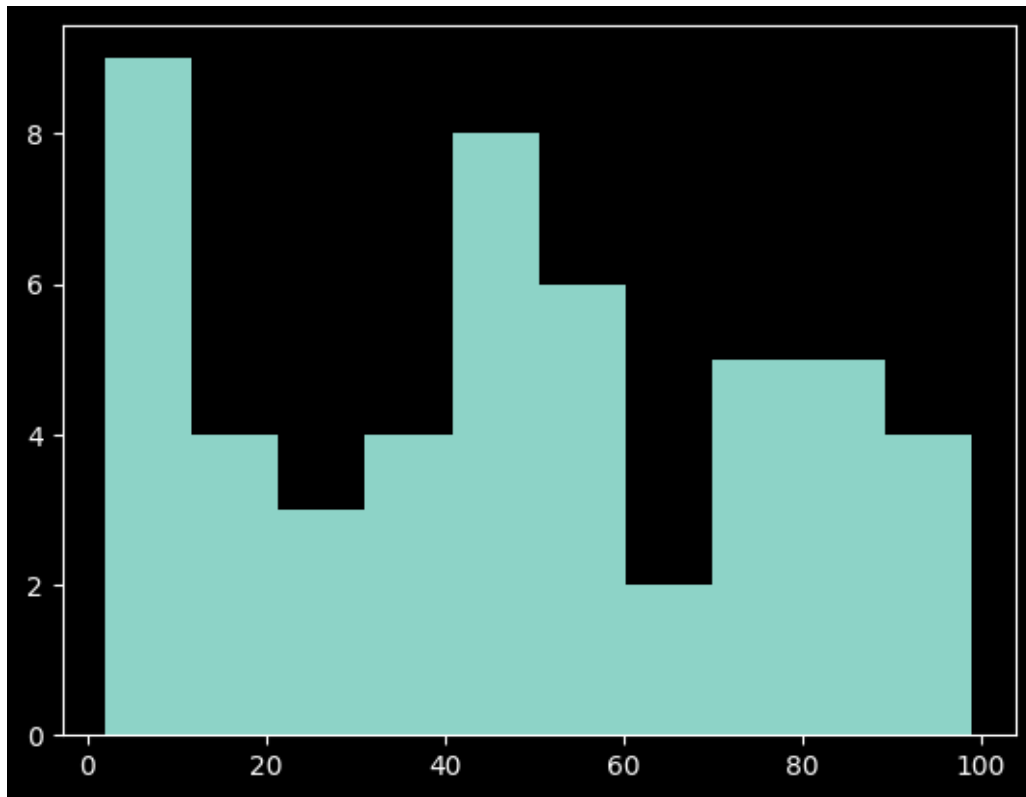
```
[1]: import matplotlib.pyplot as plt
import numpy as np
import pandas as pd
```

```
[2]: plt.style.use('dark_background')
```

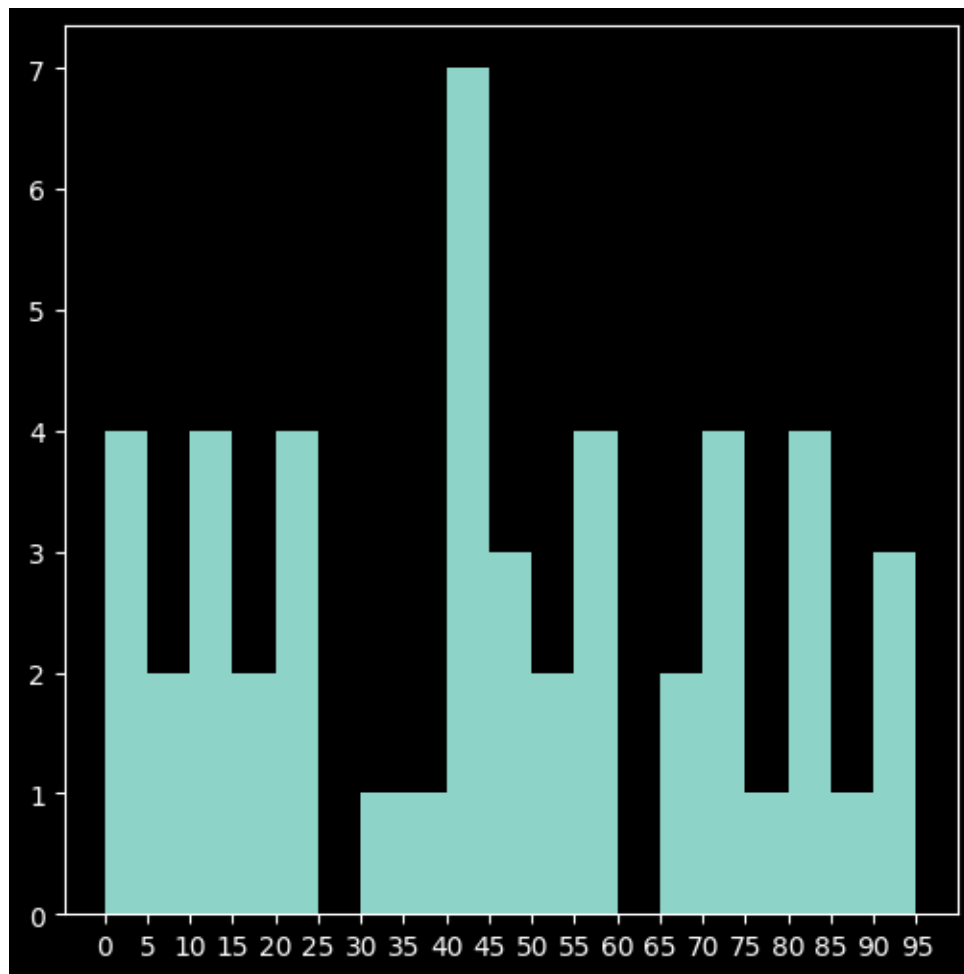
```
[3]: marks_50_students = np.random.randint(0,100,(50))
marks_50_students
```

```
[3]: array([49, 81, 11, 43, 18, 53,  4, 47, 58, 37, 40, 70, 90, 57, 55, 83, 24,
          4, 73, 44, 66, 40, 22, 87, 14, 80, 74,  2, 57, 95,  7, 43, 92, 11,
          75, 20, 51, 16, 66,  7, 24,  4, 11, 99, 82, 42, 41, 49, 74, 34],
          dtype=int32)
```

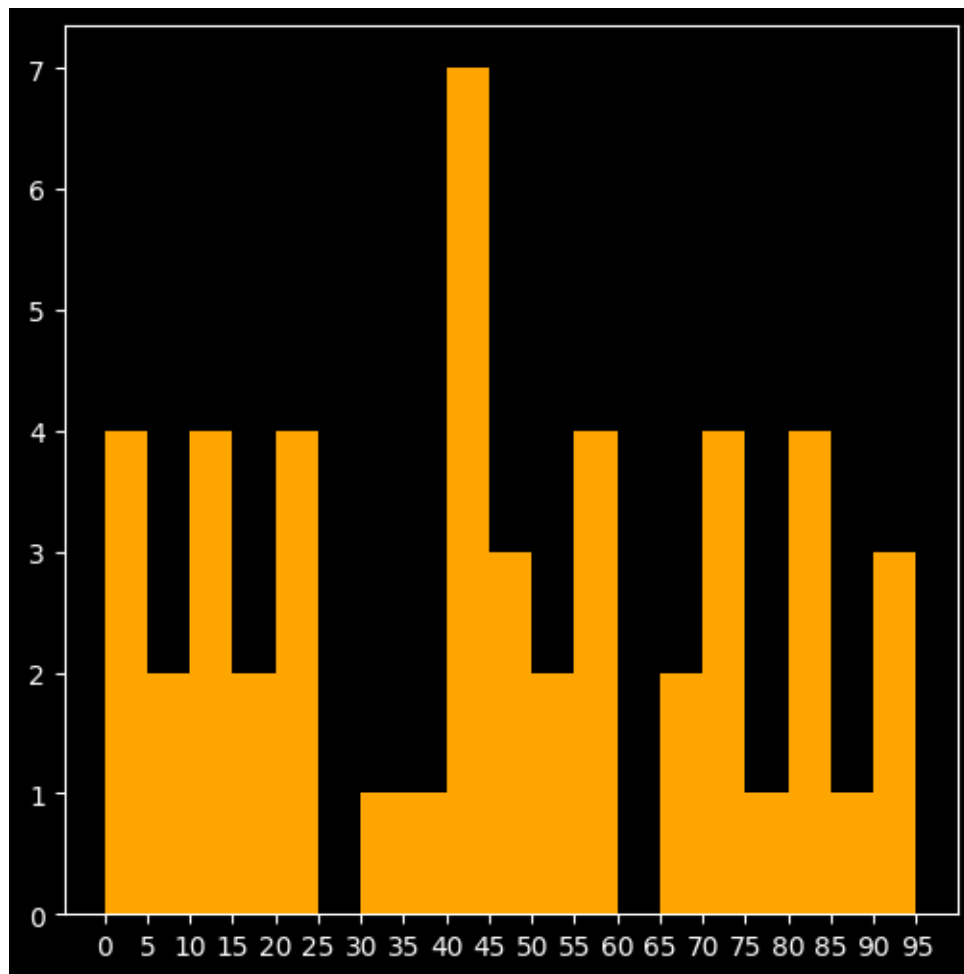
```
[4]: plt.hist(marks_50_students)
plt.show()
```



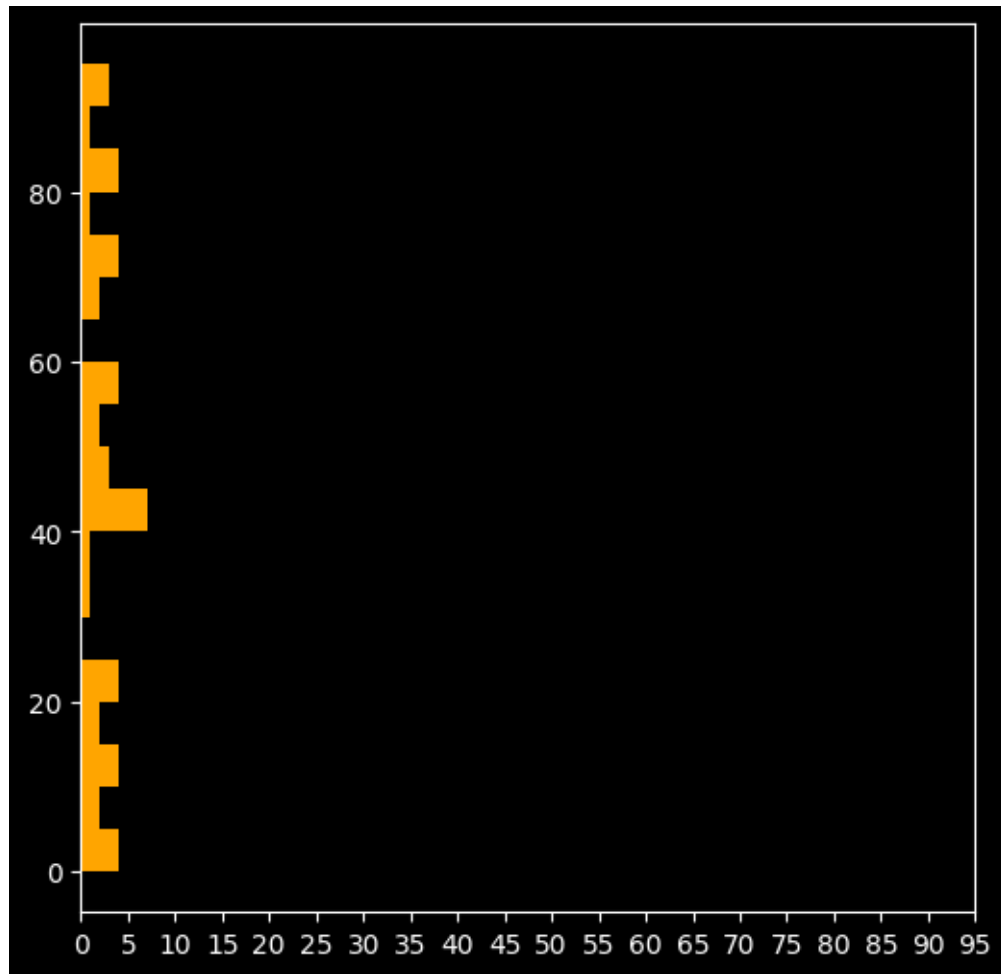
```
[8]: bins = np.arange(0,100,5)
plt.figure(figsize = (6,6))
plt.hist(marks_50_students,bins = bins)
plt.xticks(np.arange(0,100,5))
plt.show()
```



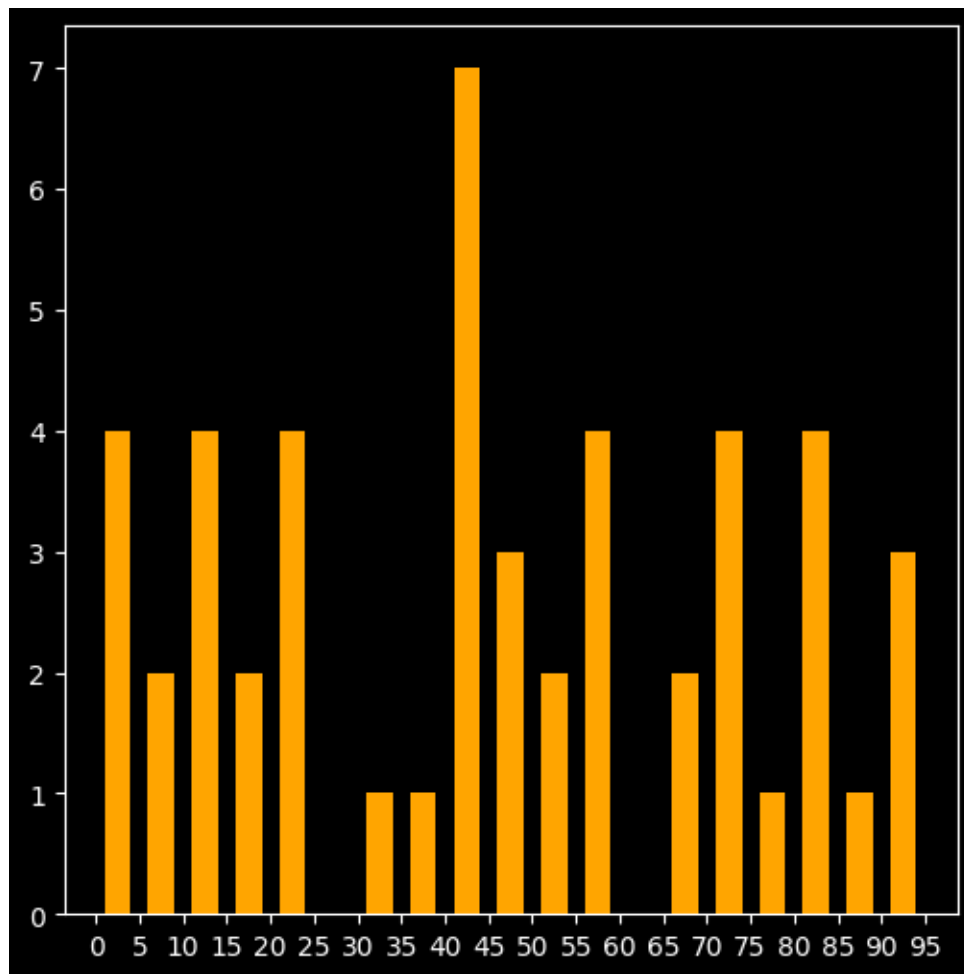
```
[9]: bins = np.arange(0,100,5)
plt.figure(figsize = (6,6))
plt.hist(marks_50_students,bins = bins,color = 'orange')
plt.xticks(np.arange(0,100,5))
plt.show()
```



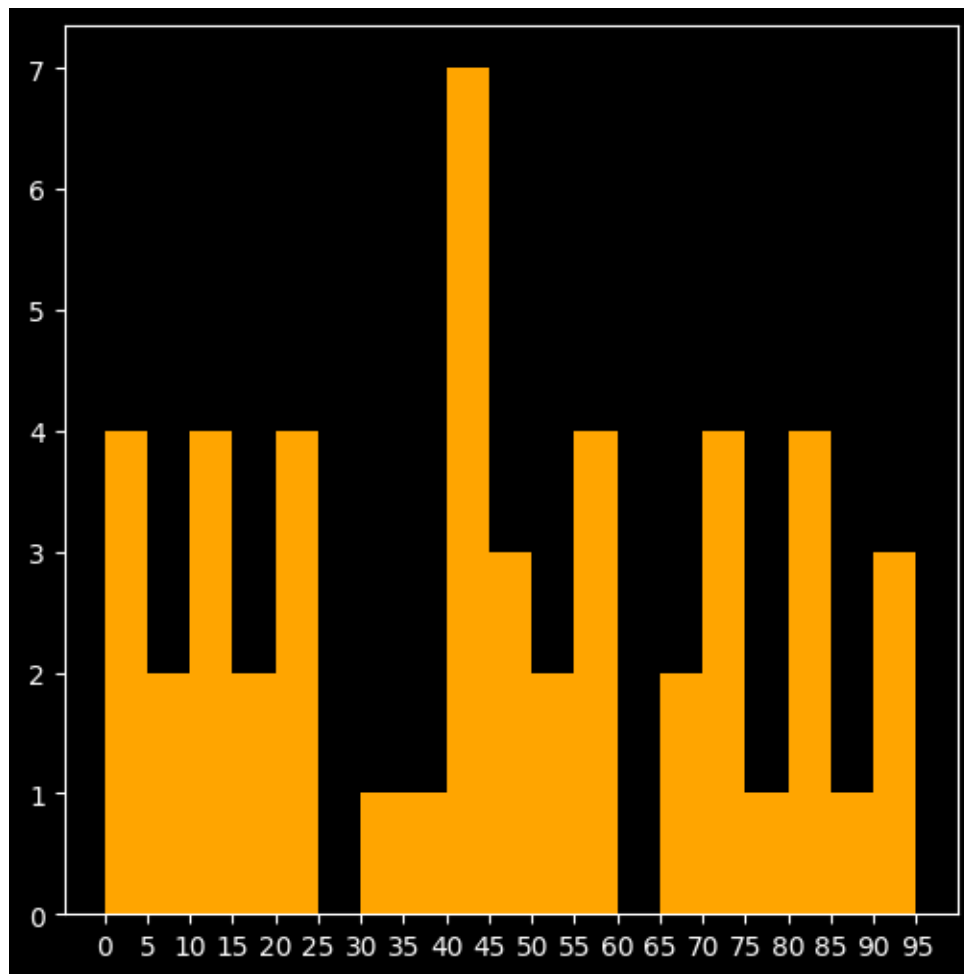
```
[10]: bins = np.arange(0,100,5)
plt.figure(figsize = (6,6))
plt.hist(marks_50_students,bins = bins,color = 'orange',orientation = 'horizontal')
plt.xticks(np.arange(0,100,5))
plt.show()
```



```
[11]: bins = np.arange(0,100,5)
plt.figure(figsize = (6,6))
plt.hist(marks_50_students,bins = bins,color = 'orange',rwidth = 0.6)
plt.xticks(np.arange(0,100,5))
plt.show()
```

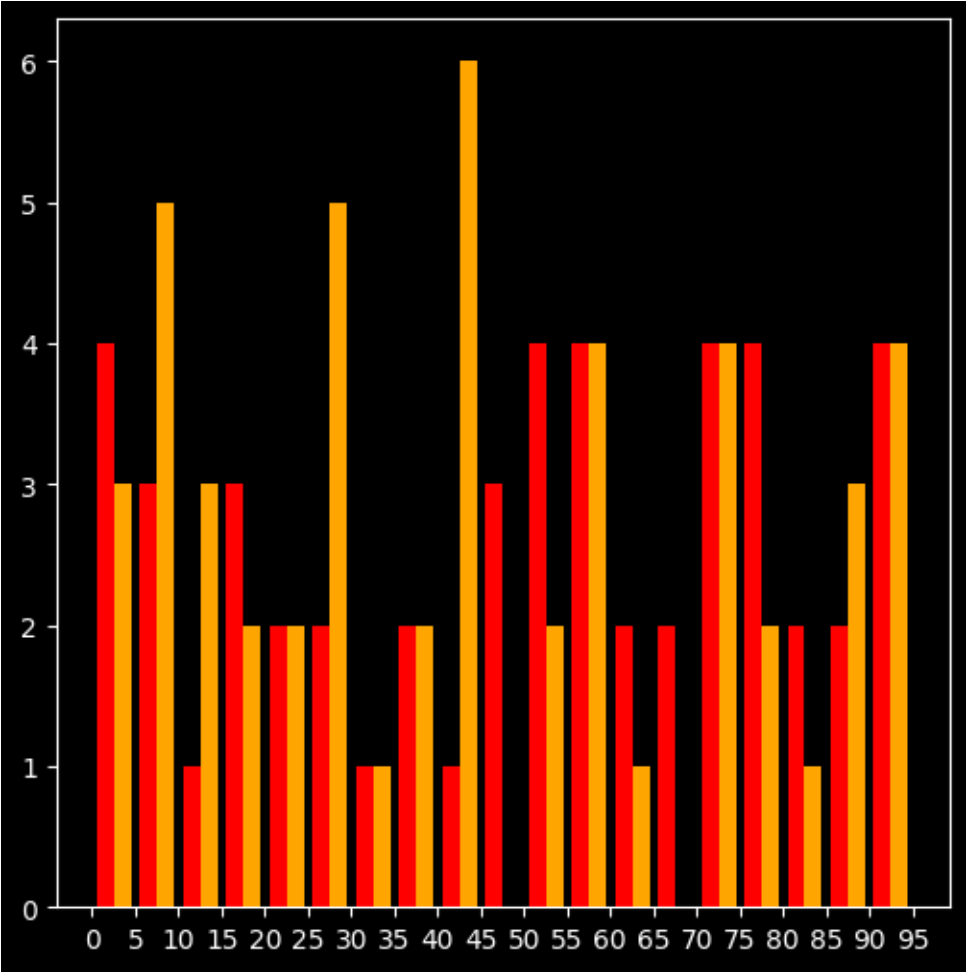


```
[14]: # Hist Types = 'bar' , 'barstacked', 'step', 'stepfilled'
bins = np.arange(0,100,5)
plt.figure(figsize = (6,6))
plt.hist(marks_50_students,bins = bins,color = 'orange',histtype = 'stepfilled')
plt.xticks(np.arange(0,100,5))
plt.show()
```



```
[15]: marks_50_students1 = np.random.randint(0,100,(50))
      marks_50_students2 = np.random.randint(0,100,(50))
```

```
[18]: bins = np.arange(0,100,5)
      plt.figure(figsize = (6,6))
      plt.hist([marks_50_students1,marks_50_students2],bins = bins,color = ['red','orange'],histtype = 'bar')
      plt.xticks(np.arange(0,100,5))
      plt.show()
```



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