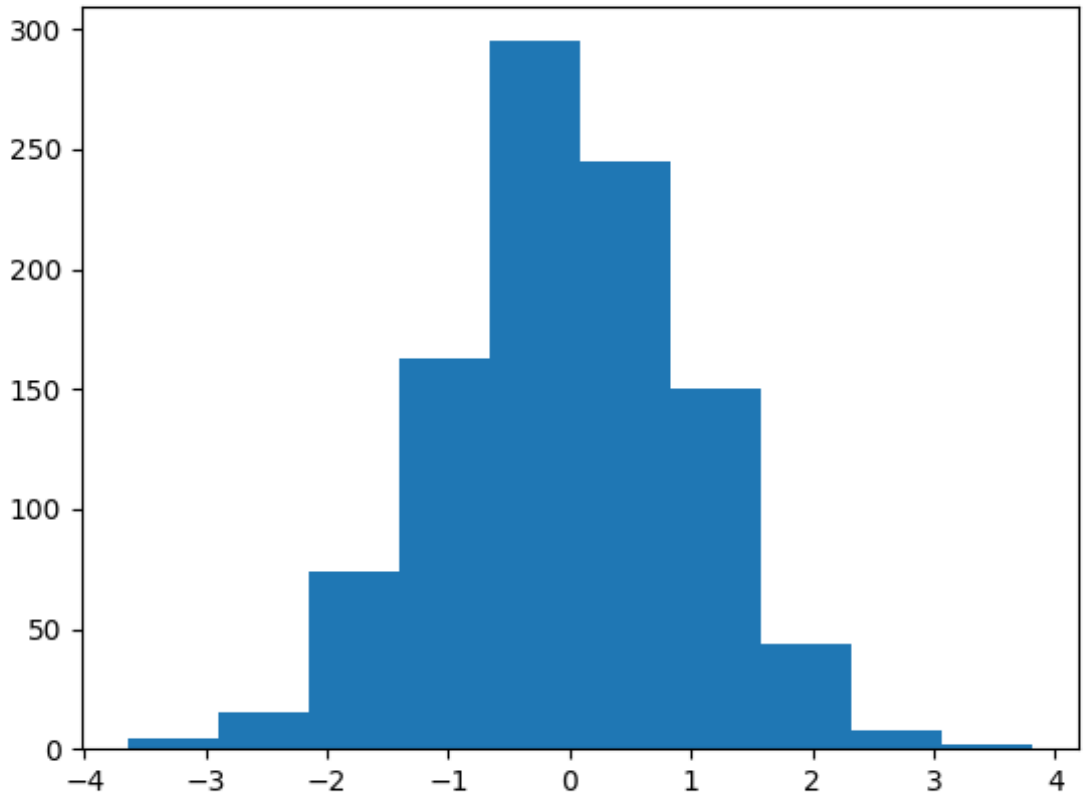
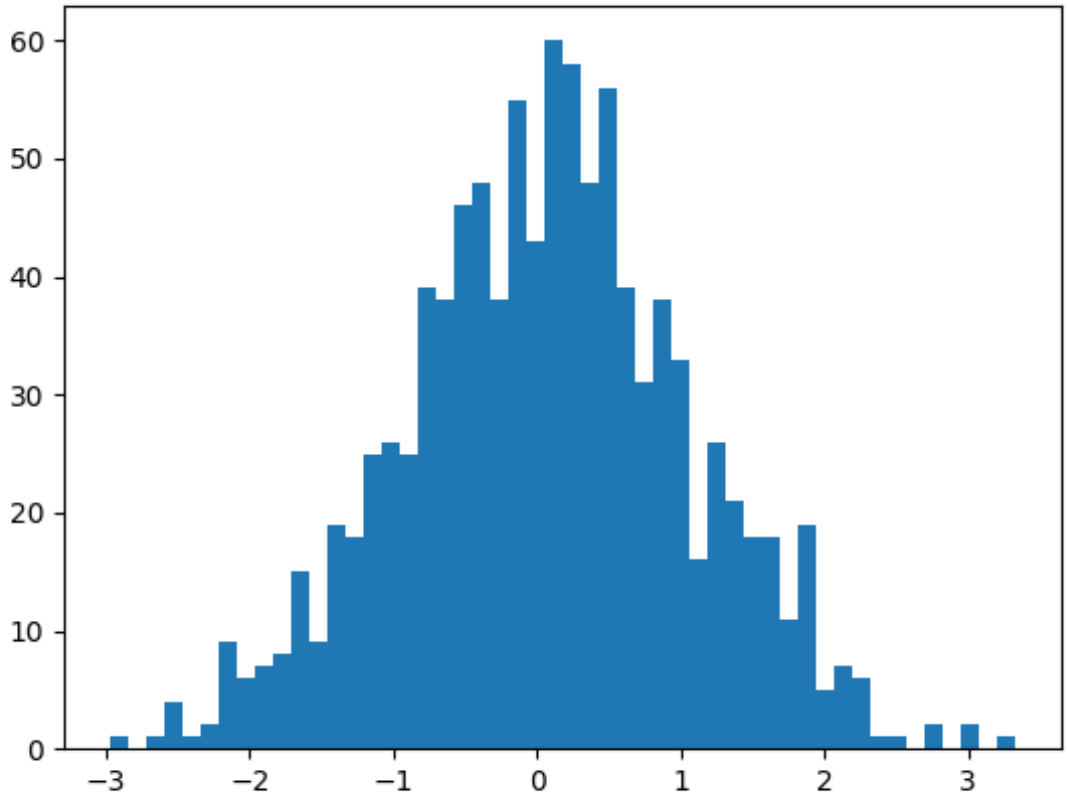
histograms are the important plots for statistical analysis. we can create a histogram by hist() function.

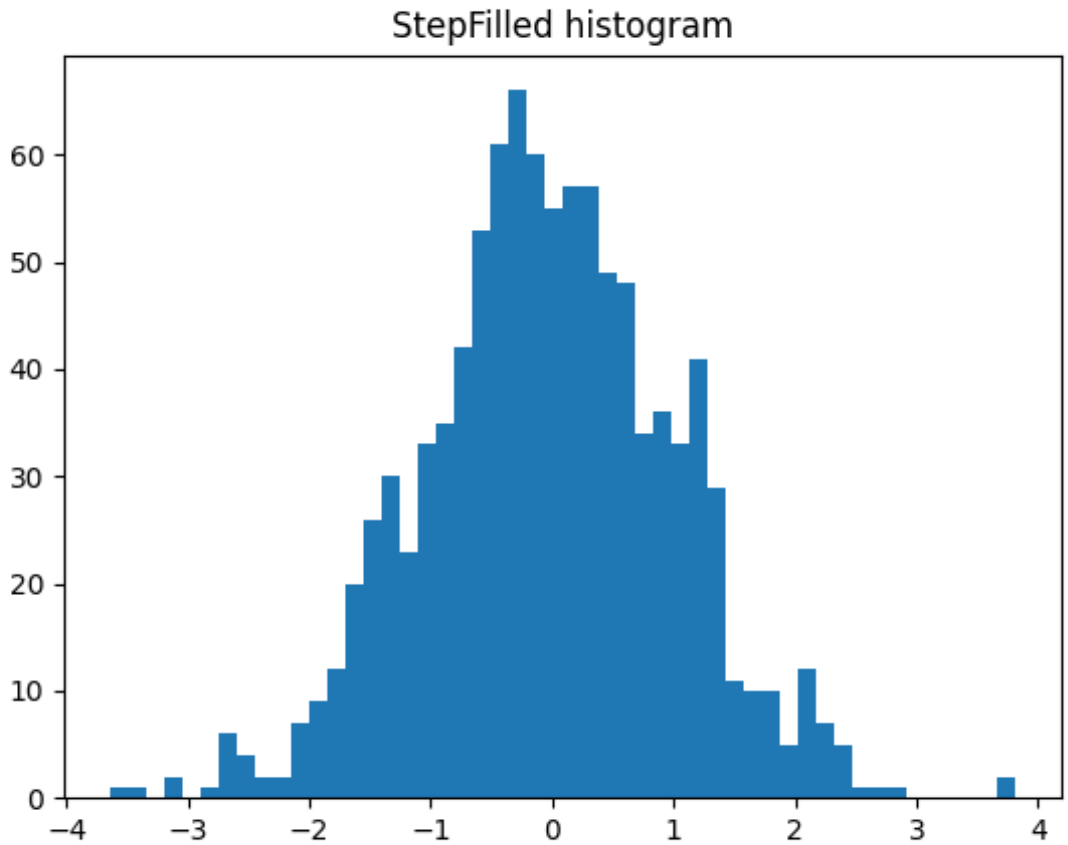
```
import matplotlib.pyplot as plt
import numpy as np
x = np.random.normal(0, 1, 1000)
plt.hist(x)
plt.show()
```



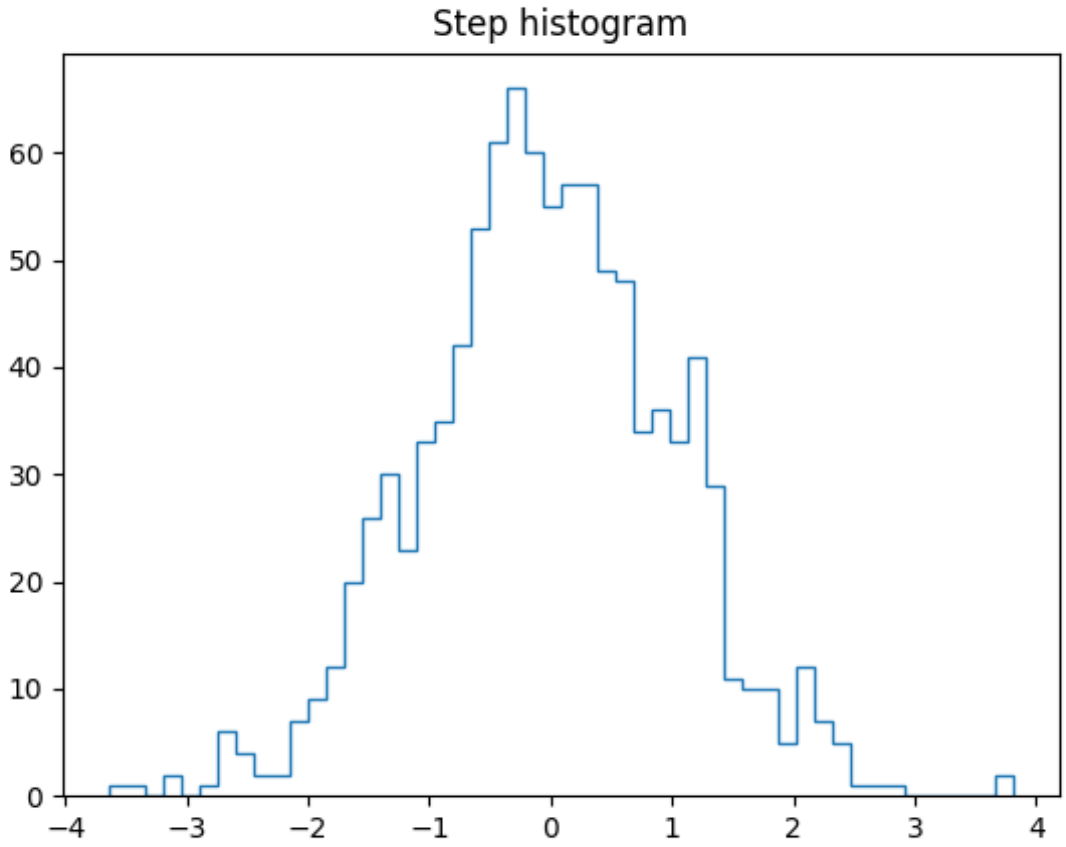

```
#parameter bins is used for creating number of bins or we can say number of columns.
plt.hist(x, bins=50)
plt.show()
```



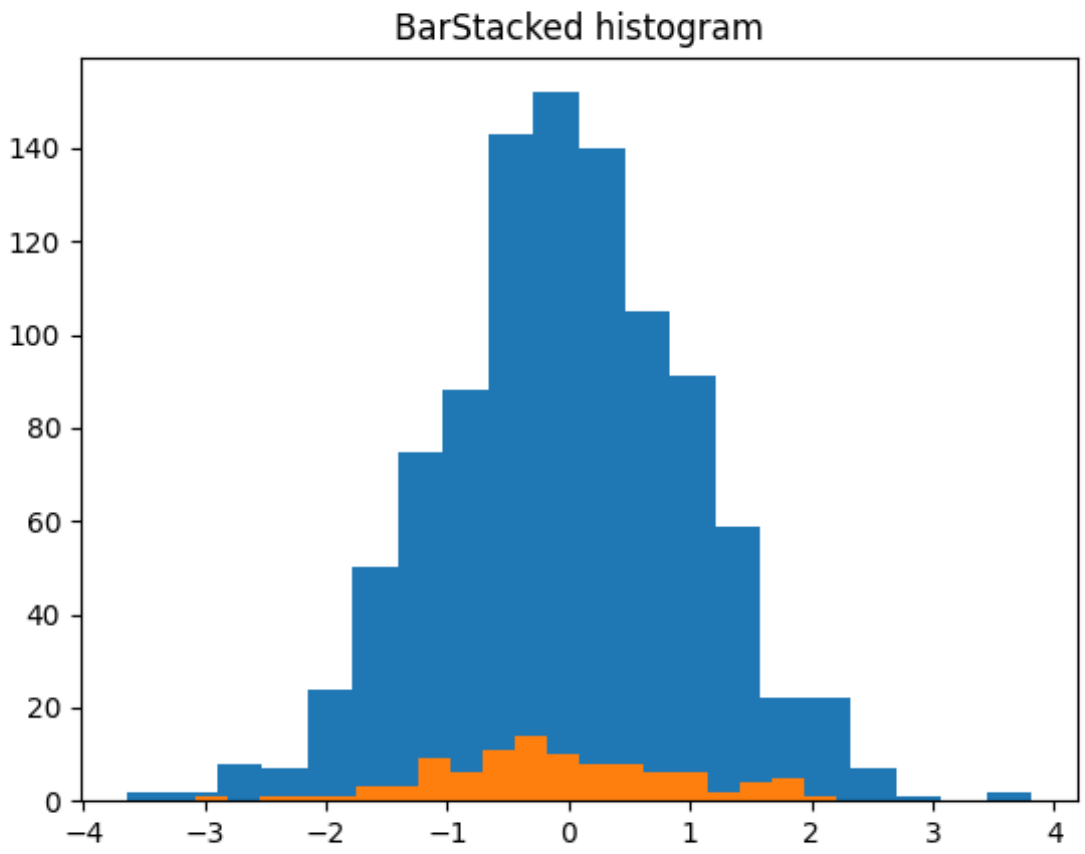

```
plt.hist(x, bins=50, histtype='stepfilled') #its a default type
histogram
plt.title('StepFilled histogram')
plt.show()
```



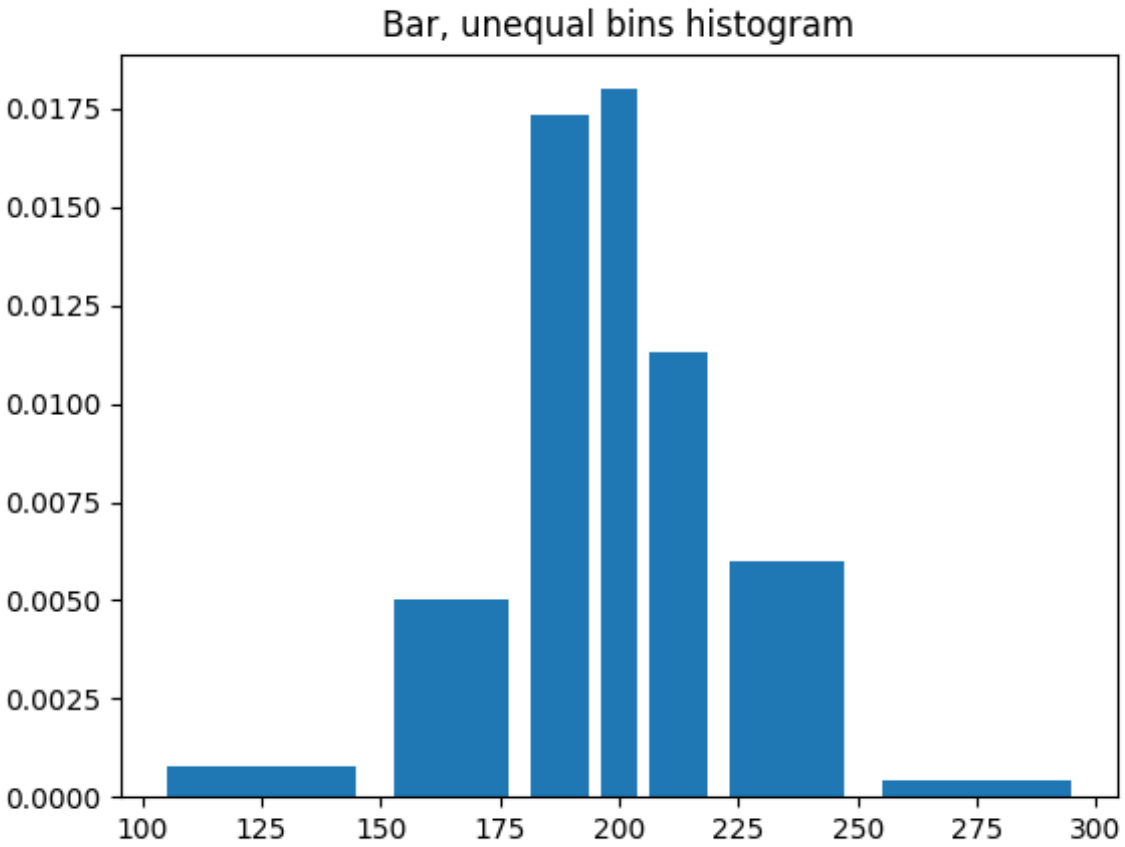
```
plt.hist(x, bins=50, histtype='step')
plt.title('Step histogram')
plt.show()
```




```
plt.hist(x, bins=20, histtype='barstacked')
y = np.random.normal(0, 1, 100)
plt.hist(y, bins=20, histtype='barstacked')
plt.title('BarStacked histogram')
plt.show()
```




```
x = np.random.normal(200, 25, 100)
bins = [100, 150, 180, 195, 205, 220, 250, 300]
plt.hist(x, bins, density=True, histtype='bar', rwidth=0.8)
plt.title('Bar, unequal bins histogram')
plt.show()
```



```
x = np.random.normal(0, 1, 1000)
y = np.random.normal(-1, 1, 1000)
z = np.random.normal(2, 1, 1000)
plt.hist(x, bins=60, alpha=0.5)
plt.hist(y, bins=60, alpha=0.5)
plt.hist(z, bins=60, alpha=0.5)
plt.show()
```