

violin plots are similar to box plots, except that they also show probability density of the data at different values. violin plots are used to represent comparison of a variable distribution across different categories.

#numpy.random.normal(mean, standard\_deviation, size) create the normal distribution data

```
import numpy as np
import matplotlib.pyplot as plt
x = np.random.normal(100, 10, 500)
y = np.random.normal(70, 7, 500)
z = np.random.normal(50, 4, 500)
```

```
data = [x, y, z]
plt.violinplot(data)
plt.show()
```

#other parameters showextrema=True, showmedians=False  
#for more type plt.violinplot





