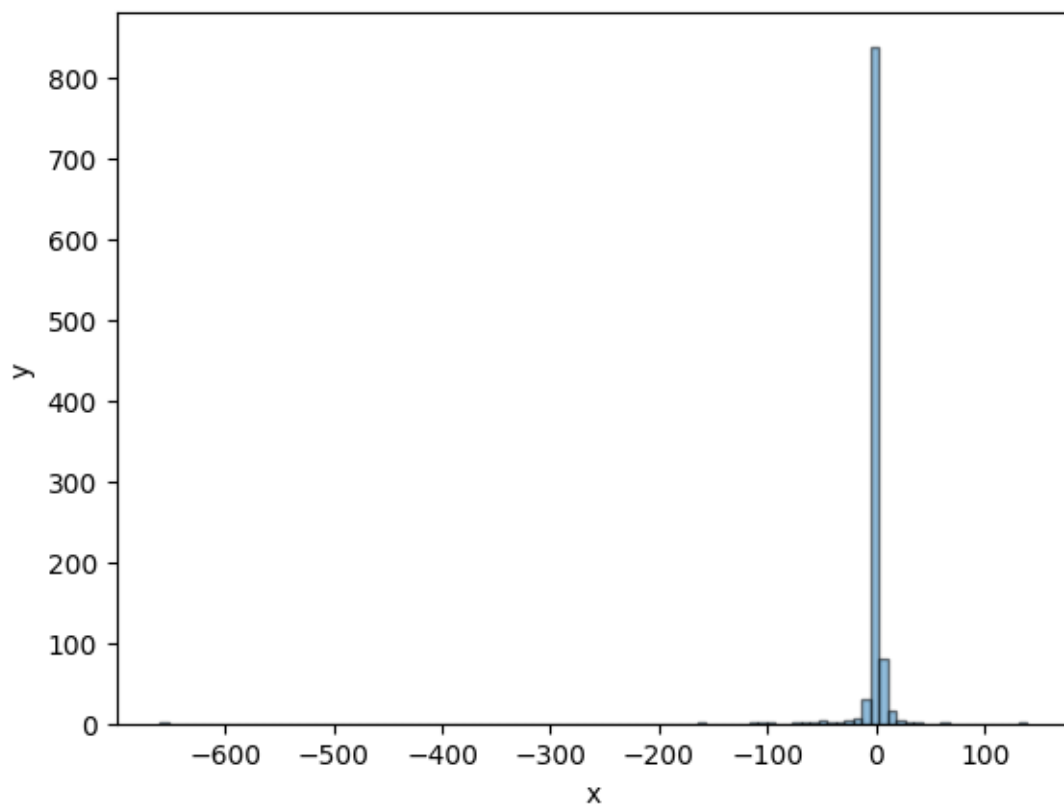# Code-journal10

February 8, 2024

```
[1]: import matplotlib.pyplot as plt
     import numpy as np
     %matplotlib inline
```

```
[3]: n = 1000
     x = np.random.standard_cauchy(n)

     width = 0.5
     histmin = np.floor(min(x))
     histmax = np.ceil(max(x)) + width

     bins = np.arange(histmin,histmax,width)
     plt.hist(x,bins=100,alpha=0.5,edgecolor="black")
     plt.xlabel('x')
     plt.ylabel('y')
     plt.savefig('random_histogram.png',bbox_inches='tight',dpi=600)
     plt.show()
```