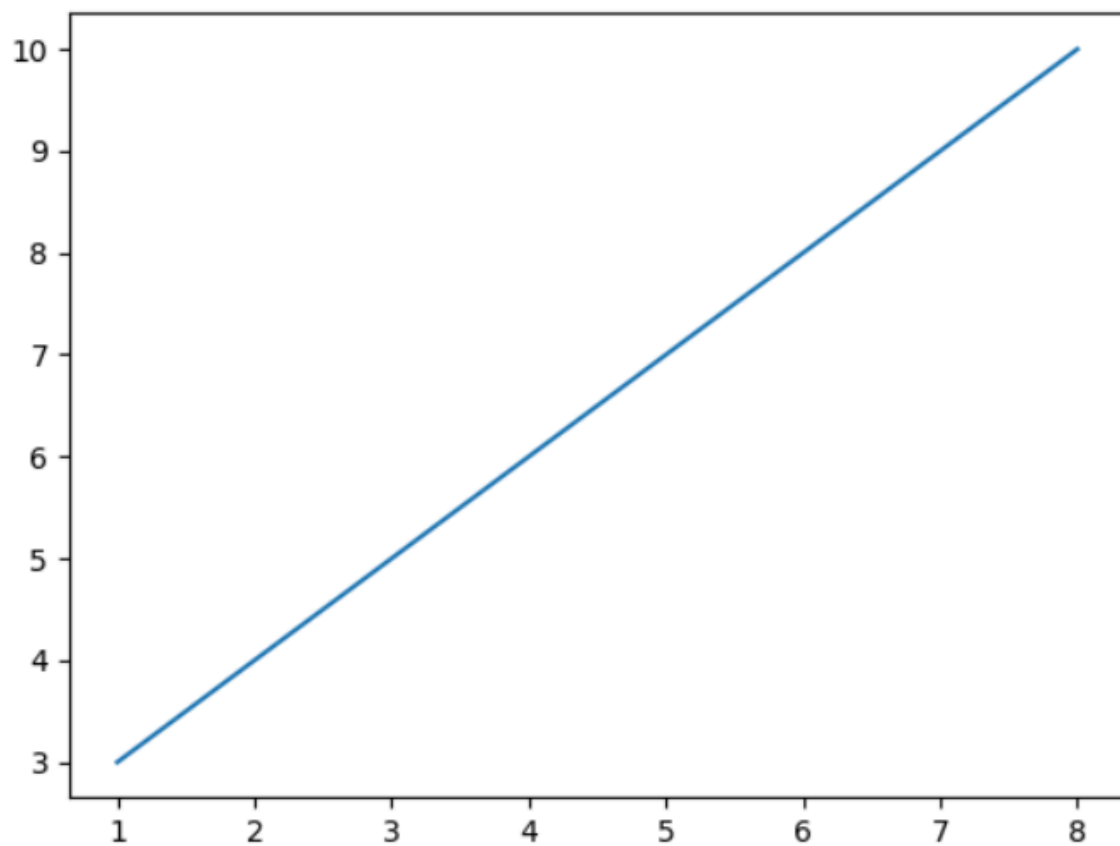


```
## STANDARD
import matplotlib.pyplot as plt
import numpy as np

xpoints = np.array([1, 8])
ypoints = np.array([3, 10])

plt.plot(xpoints, ypoints) # Line can be omitted by giving (...ypoints, 'o')
plt.show()
```



Scatter plot

```
import matplotlib.pyplot as plt
import numpy as np
```

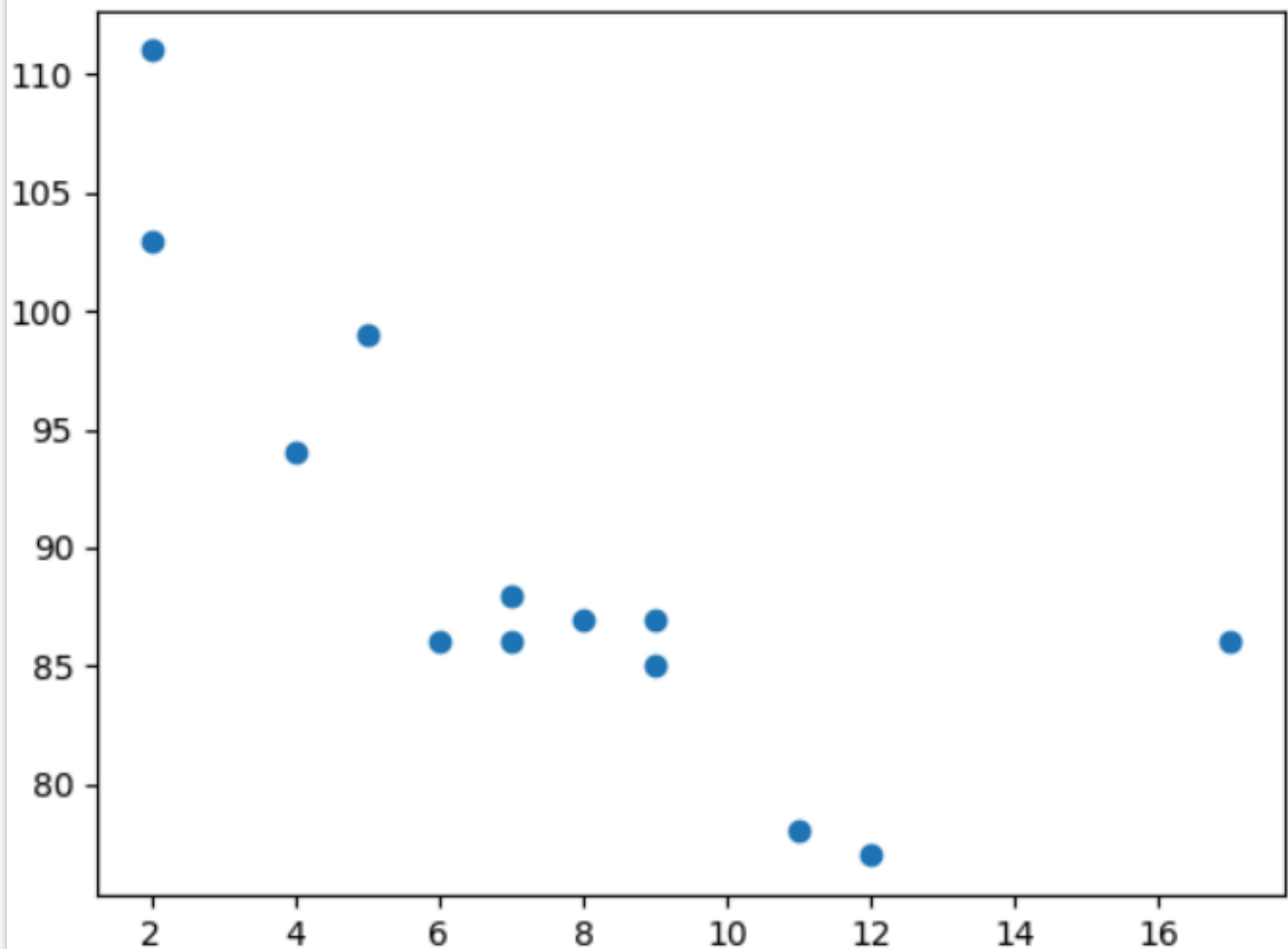
```

x = np.array([5,7,8,7,2,17,2,9,4,11,12,9,6])
y = np.array([99,86,87,88,111,86,103,87,94,78,77,85,86])

plt.scatter(x, y)
plt.show()

# To compare plots give everything in the same kernel

```



Bar plot

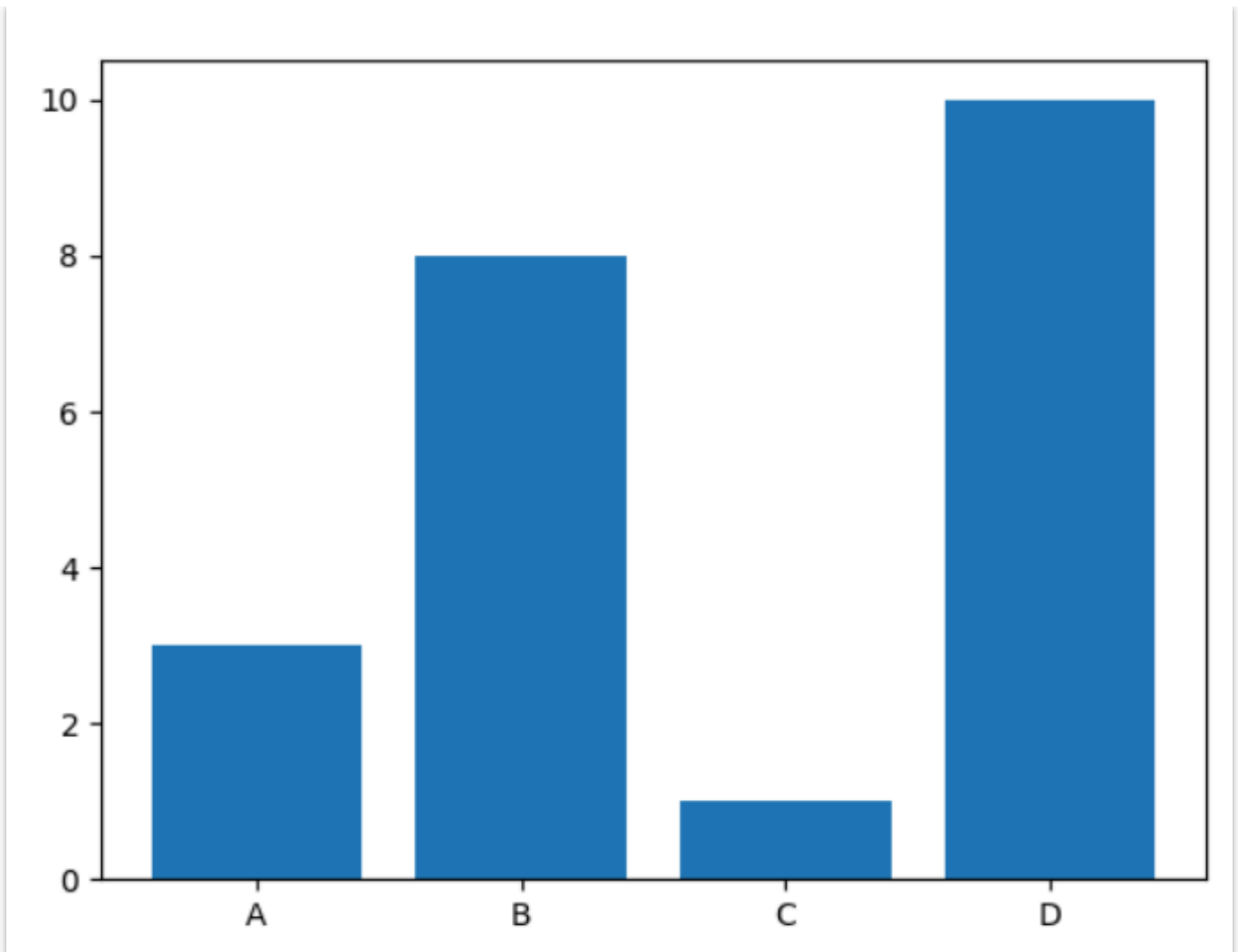
```

import matplotlib.pyplot as plt
import numpy as np

x = np.array(["A", "B", "C", "D"])
y = np.array([3, 8, 1, 10])

plt.bar(x,y) # give barh here and bar graph becomes horizontal
plt.show()

```



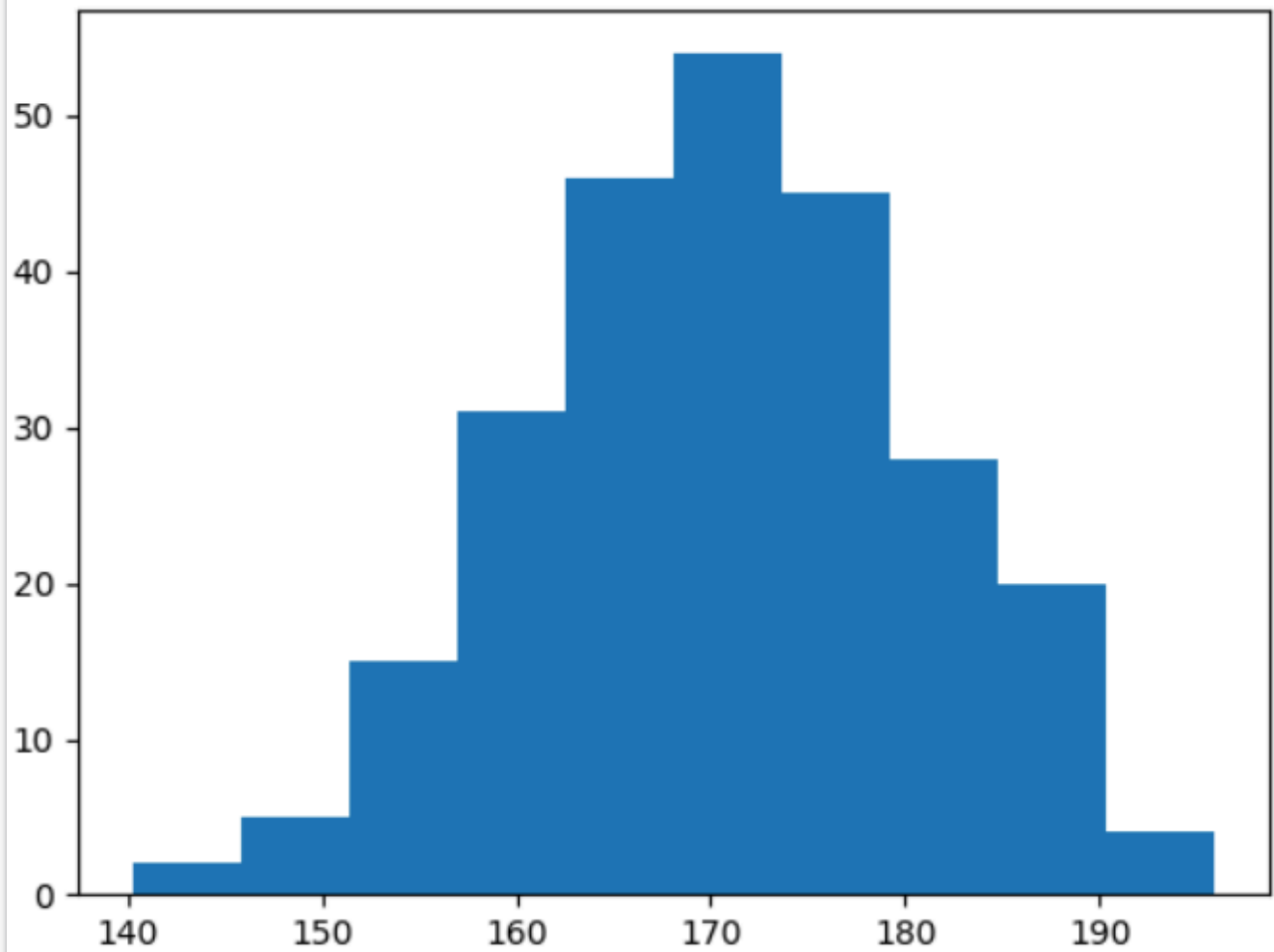
Histogram

```
import matplotlib.pyplot as plt
import numpy as np

x = np.random.normal(170, 10, 250)

plt.hist(x)
plt.show()

## In sns it is sns.distplot
```

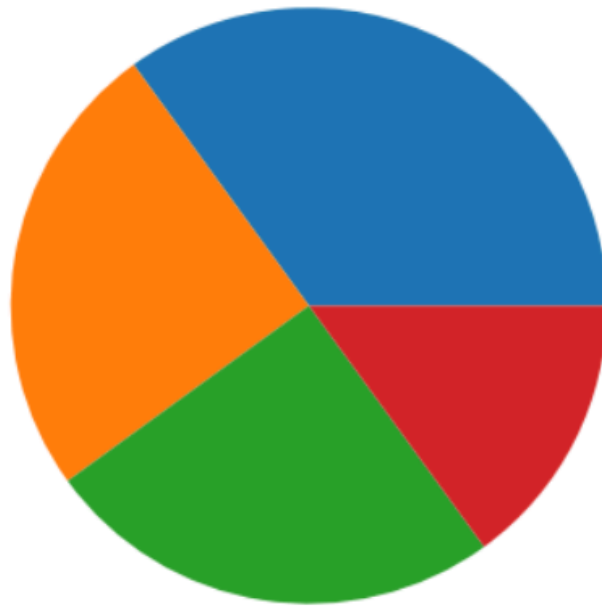


Pie charts

```
import matplotlib.pyplot as plt
import numpy as np

y = np.array([35, 25, 25, 15])

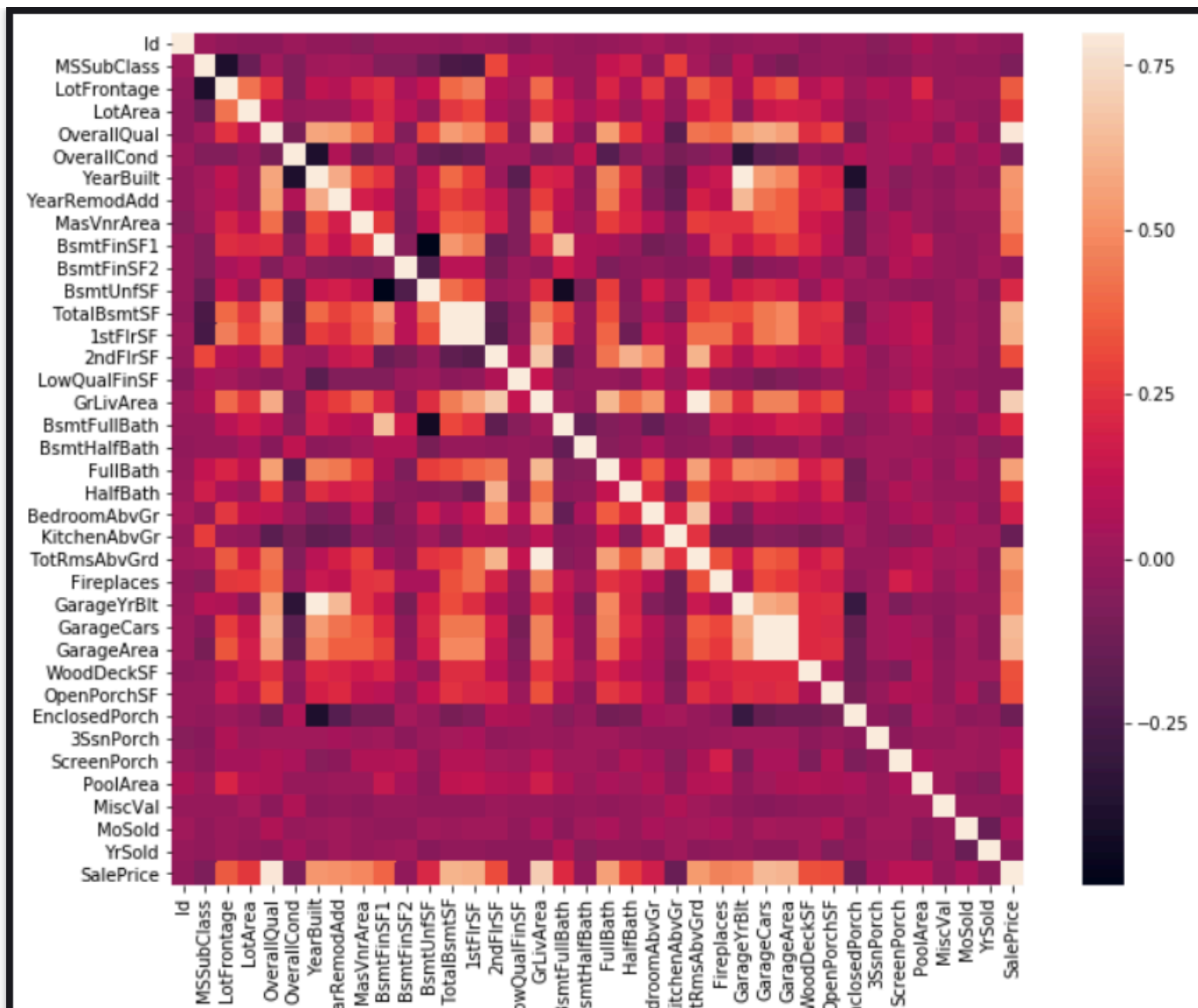
plt.pie(y)
plt.show()
```



Heatmap (Correlation)

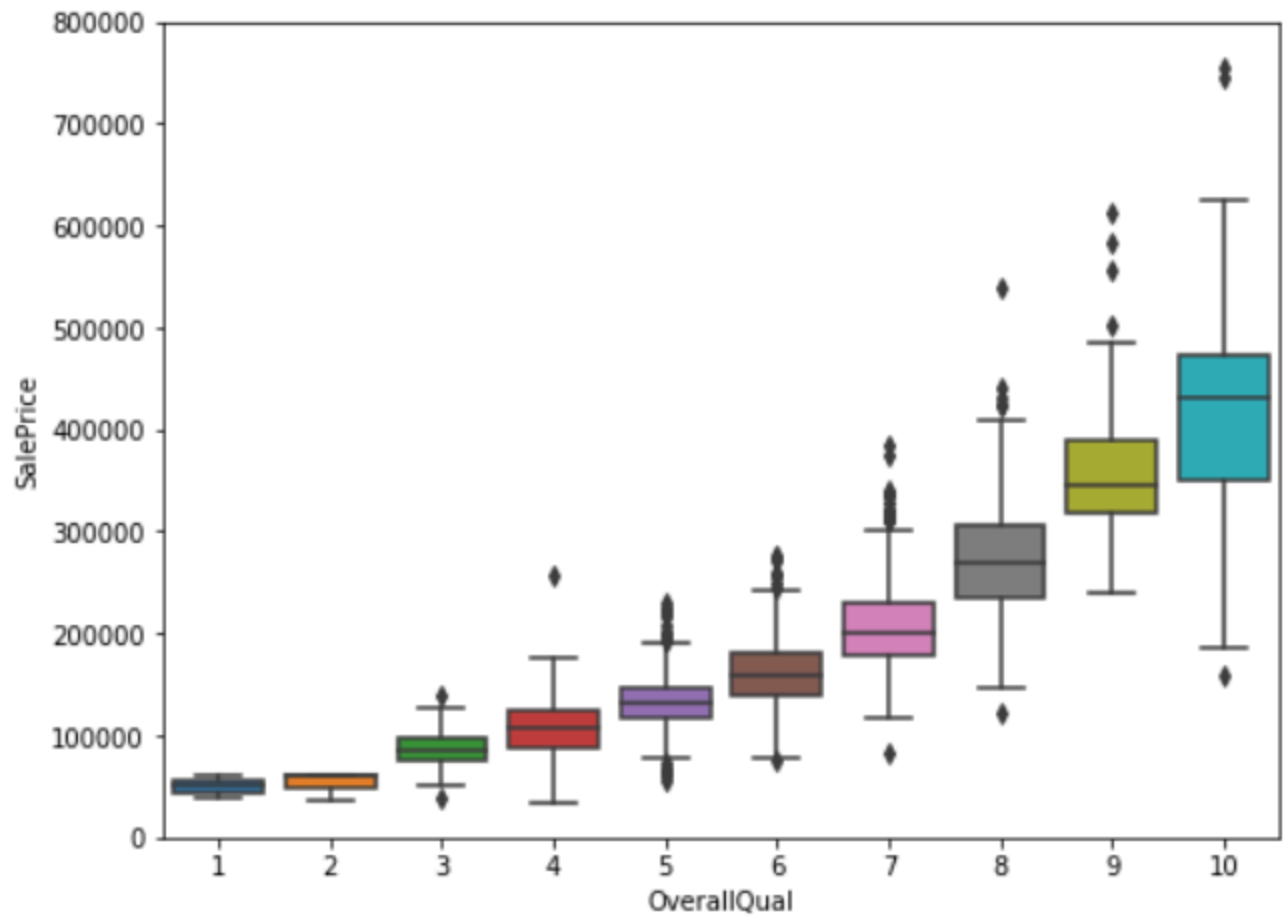
```
corrmat = df_train.corr()  
f, ax = plt.subplots(figsize=(12, 9))  
sns.heatmap(corrmat, vmax=.8, square=True);
```

gives good idea of heatmap code



Boxplot

```
var = 'OverallQual'
data = pd.concat([df_train['SalePrice'], df_train[var]], axis=1)
f, ax = plt.subplots(figsize=(8, 6))
fig = sns.boxplot(x=var, y="SalePrice", data=data)
fig.axis(ymin=0, ymax=800000);
```



Count plot

```
colors = ["#0101DF", "#DF0101"]
```

```
sns.countplot('Class', data=df, palette=colors)
```

```
plt.title('Class Distributions \n (0: No Fraud || 1: Fraud)', fontsize=14)
```

