

```
In [1]: import pandas as pd
import seaborn as sns
sns.set(color_codes=True)
```

```
In [2]: from matplotlib import pyplot as plt
```

```
In [3]: eye = pd.read_csv('test.csv')
```

```
In [4]: eye.head()
```

```
Out[4]:
```

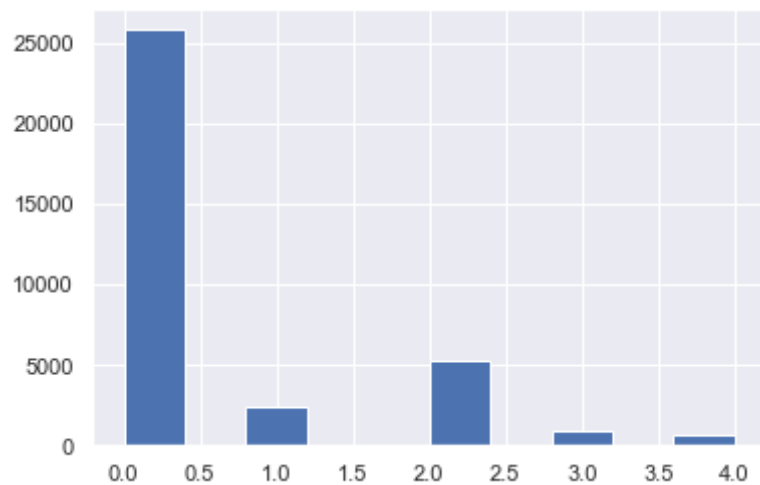
	image	level
0	10_left	0
1	10_right	0
2	13_left	0
3	13_right	0
4	15_left	1

```
In [5]: eye.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 35126 entries, 0 to 35125
Data columns (total 2 columns):
#   Column  Non-Null Count  Dtype  
---  -
0    image   35126 non-null    object 
1    level   35126 non-null    int64  
dtypes: int64(1), object(1)
memory usage: 549.0+ KB
```

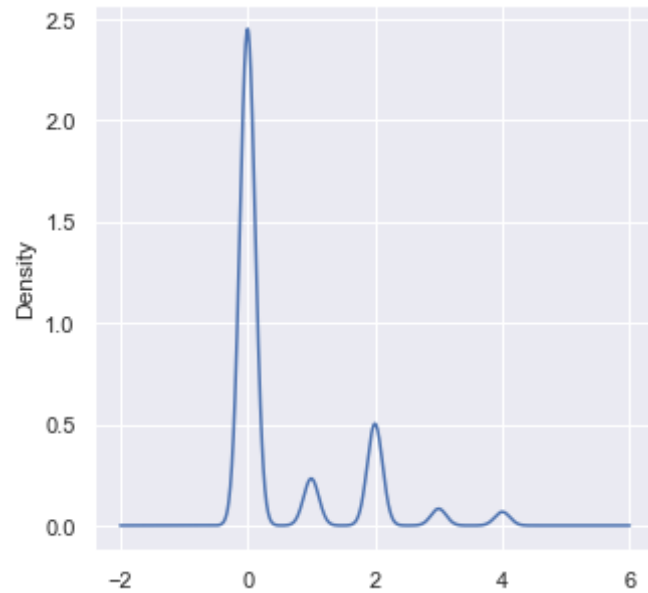
```
In [6]: plt.hist(eye['level'])
```

```
Out[6]: (array([25810.,    0., 2443.,    0.,    0., 5292.,    0.,  873.,
                0.,  708.]),
        array([0. , 0.4, 0.8, 1.2, 1.6, 2. , 2.4, 2.8, 3.2, 3.6, 4. ]),
        <BarContainer object of 10 artists>)
```



```
In [7]: plt.figure(figsize=(5,5))
        eye['level'].plot(kind='density')
```

```
Out[7]: <AxesSubplot:ylabel='Density'>
```

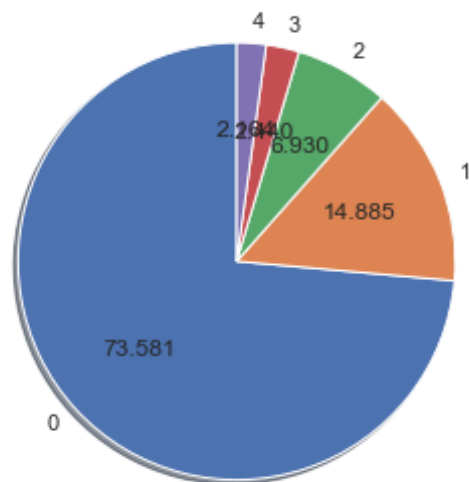


```
In [8]: eye1=eye.sample(frac=0.35)
```

```
In [9]: plt.figure(figsize=(5,5))
plt.pie(eye1['level'].value_counts(),startangle=90,autopct='%.3f',
        labels=['0','1','2','3','4'],shadow=True)
```

```
Out[9]: ([<matplotlib.patches.Wedge at 0x25c225369a0>,
<matplotlib.patches.Wedge at 0x25c22544310>,
<matplotlib.patches.Wedge at 0x25c22544c10>,
<matplotlib.patches.Wedge at 0x25c22552520>,
<matplotlib.patches.Wedge at 0x25c22552df0>],
[Text(-0.8117167814627662, -0.7423717846818588, '0'),
Text(1.022161101152315, 0.40643164651769775, '1'),
Text(0.5341015933288173, 0.961631680012477, '2'),
Text(0.23211097925976887, 1.075232297369769, '3'),
Text(0.07471295044303035, 1.0974597828786699, '4')],
[Text(-0.4427546080705997, -0.40493006437192297, '73.581'),
Text(0.5575424188103536, 0.22168998900965328, '14.885'),
Text(0.29132814181571853, 0.5245263709158965, '6.930')],
```

```
Text(0.12660598868714665, 0.5864903440198739, '2.440'),  
Text(0.0407525184234711, 0.598614427024729, '2.164'))]
```



In []: