

```
import pandas as pd
import numpy as np
import seaborn as sns
import matplotlib.pyplot as plt
import cv2

data=pd.read_csv("/content/labels_my-project-name_2023-08-03-11-35-50.csv")
data.head()
```

	label_name	bbox_x	bbox_y	bbox_width	bbox_height	image_name	image_width	image_height
0	elephant	20	26	406	270	animals.jpg	1600	900
1	tiger	1196	153	387	176	animals.jpg	1600	900
2	crocodile	960	14	613	133	animals.jpg	1600	900
3	zirafee	8	313	342	561	animals.jpg	1600	900
4	monkey	1274	598	326	270	animals.jpg	1600	900



```
data.head(1)
```

	label_name	bbox_x	bbox_y	bbox_width	bbox_height	image_name	image_width	image_height
0	elephant	20	26	406	270	animals.jpg	1600	900



```
data.describe()
```

	bbox_x	bbox_y	bbox_width	bbox_height	image_width	image_height
count	5.000000	5.000000	5.00000	5.000000	5.0	5.0
mean	691.600000	220.800000	414.80000	282.000000	1600.0	900.0
std	629.285945	242.945879	115.45432	167.007485	0.0	0.0
min	8.000000	14.000000	326.00000	133.000000	1600.0	900.0
25%	20.000000	26.000000	342.00000	176.000000	1600.0	900.0
50%	960.000000	153.000000	387.00000	270.000000	1600.0	900.0
75%	1196.000000	313.000000	406.00000	270.000000	1600.0	900.0
max	1274.000000	598.000000	613.00000	561.000000	1600.0	900.0



```
data.info()
```

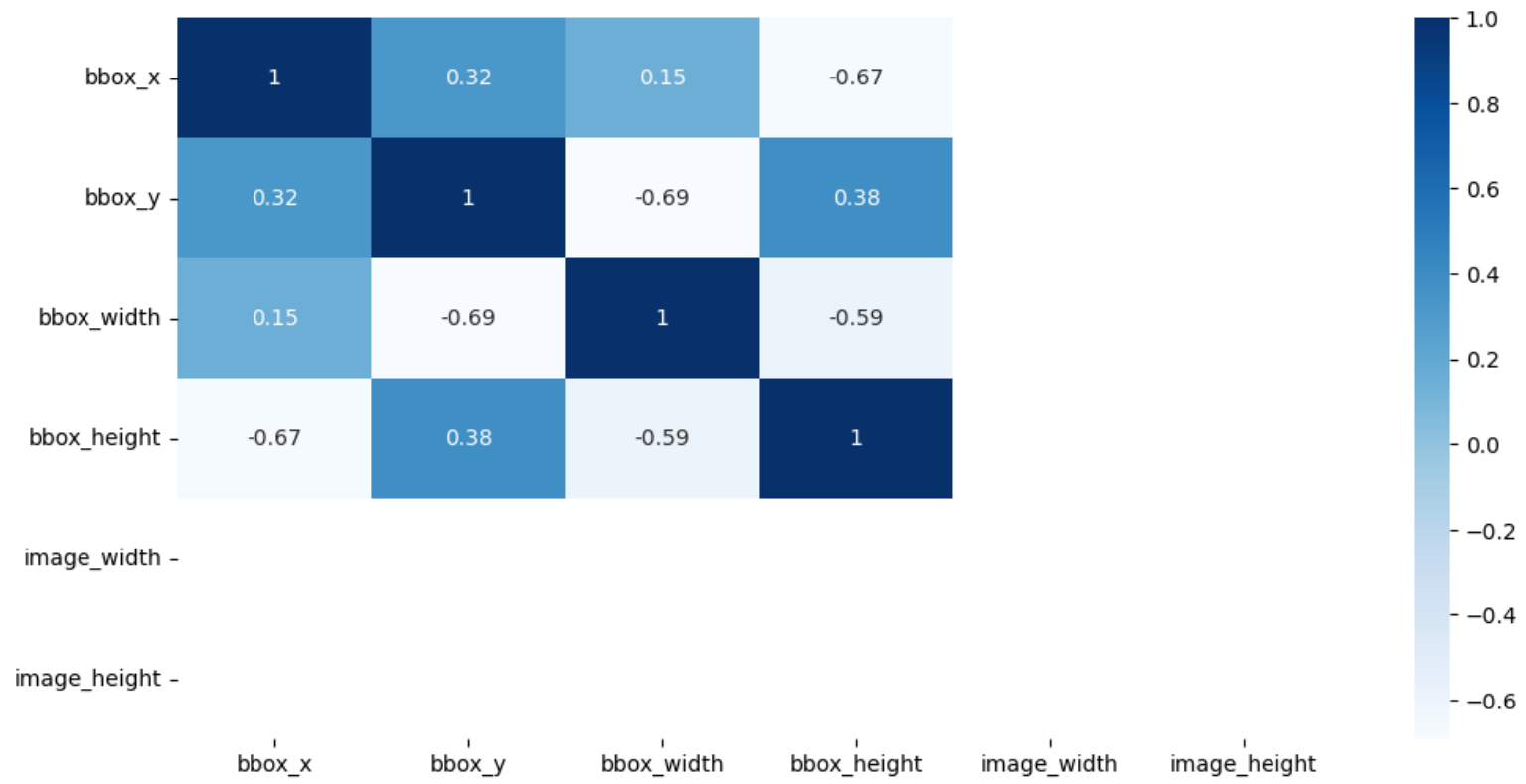
```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 5 entries, 0 to 4
Data columns (total 8 columns):
#   Column          Non-Null Count  Dtype
---  -
0   label_name      5 non-null     object
1   bbox_x          5 non-null     int64
2   bbox_y          5 non-null     int64
3   bbox_width      5 non-null     int64
4   bbox_height     5 non-null     int64
5   image_name      5 non-null     object
6   image_width     5 non-null     int64
7   image_height    5 non-null     int64
dtypes: int64(6), object(2)
memory usage: 448.0+ bytes
```

```
data.isnull().sum()
```

```
label_name      0
bbox_x          0
bbox_y          0
bbox_width      0
bbox_height     0
image_name      0
image_width     0
image_height    0
dtype: int64
```

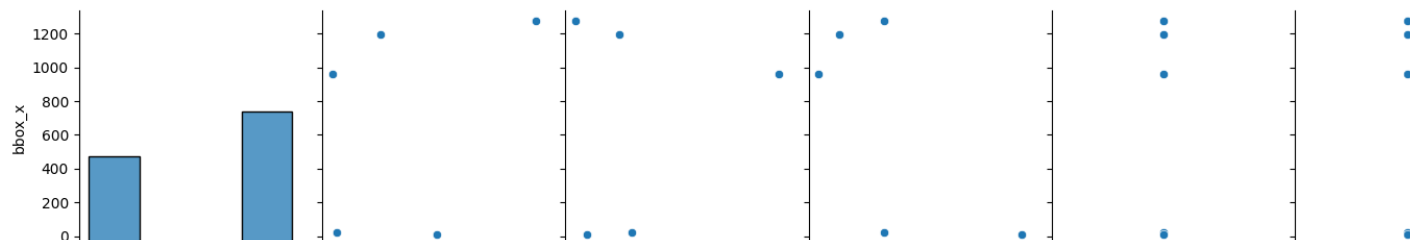
```
plt.figure(figsize=(12,6))
sns.heatmap(data.corr(),annot=True,cmap='Blues')
plt.plot()
```

```
<ipython-input-12-03a406b9c9ac>:2: FutureWarning: The default value of numeric_only in DataFrame.corr is
sns.heatmap(data.corr(),annot=True,cmap='Blues')
[]
```



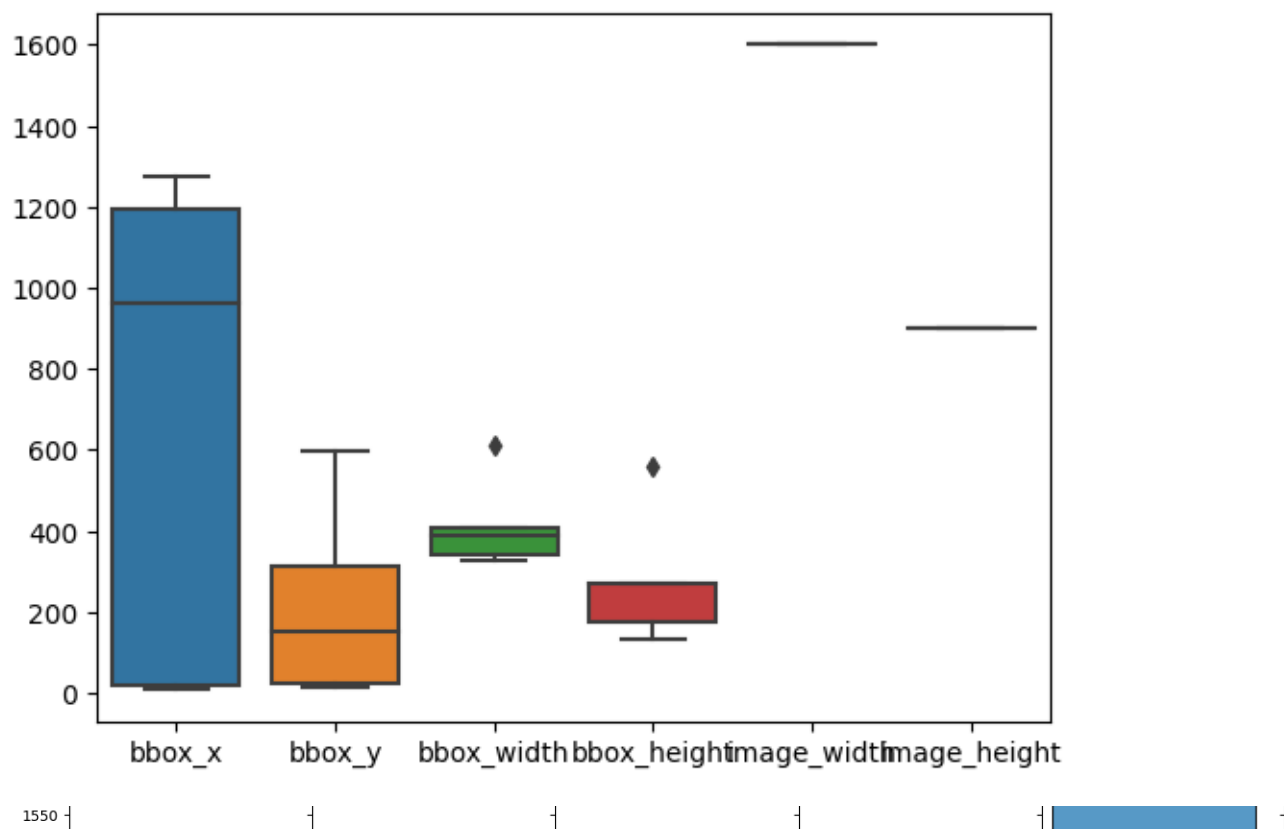
```
sns.pairplot(data)
```

<seaborn.axisgrid.PairGrid at 0x7c132c406800>



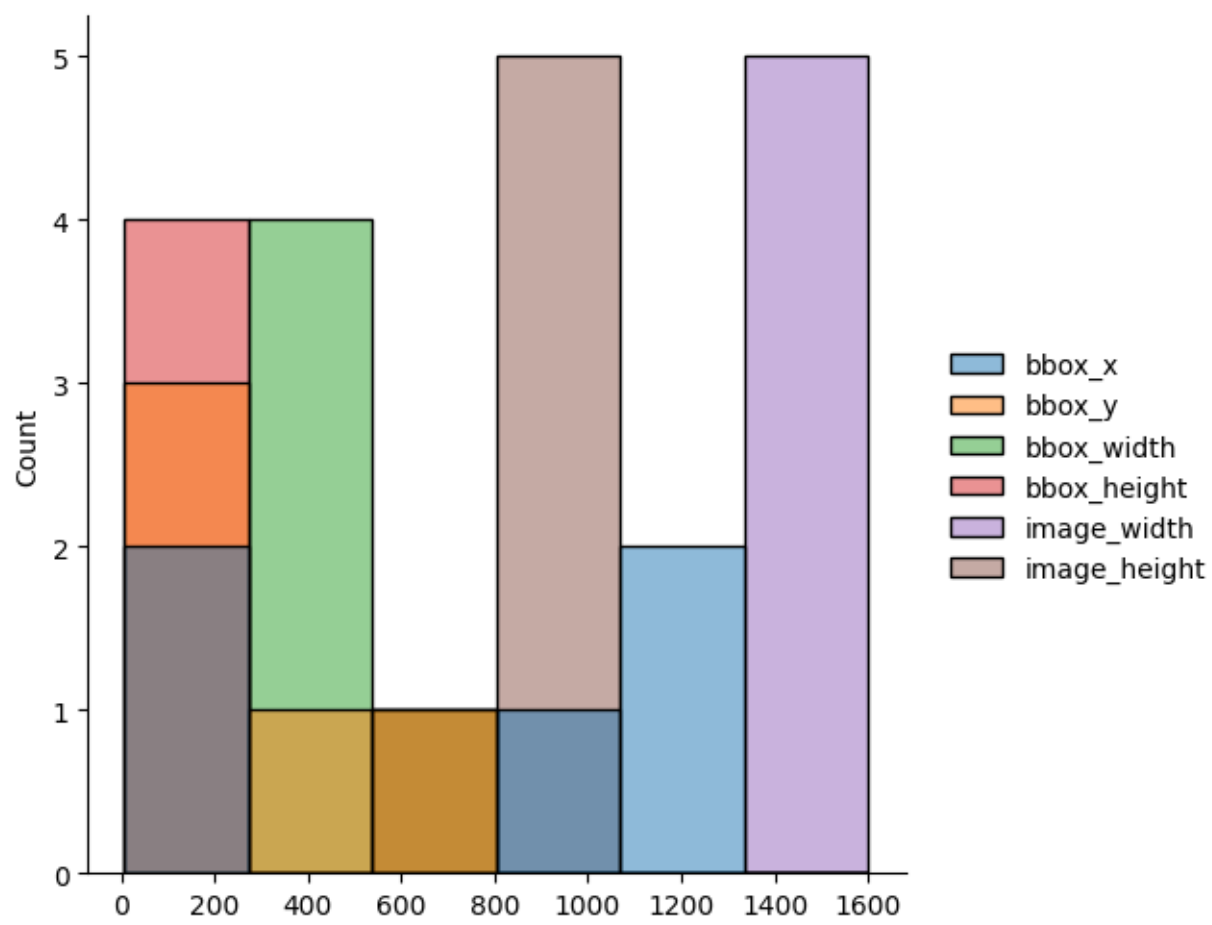
sns.boxplot(data)

<Axes: >

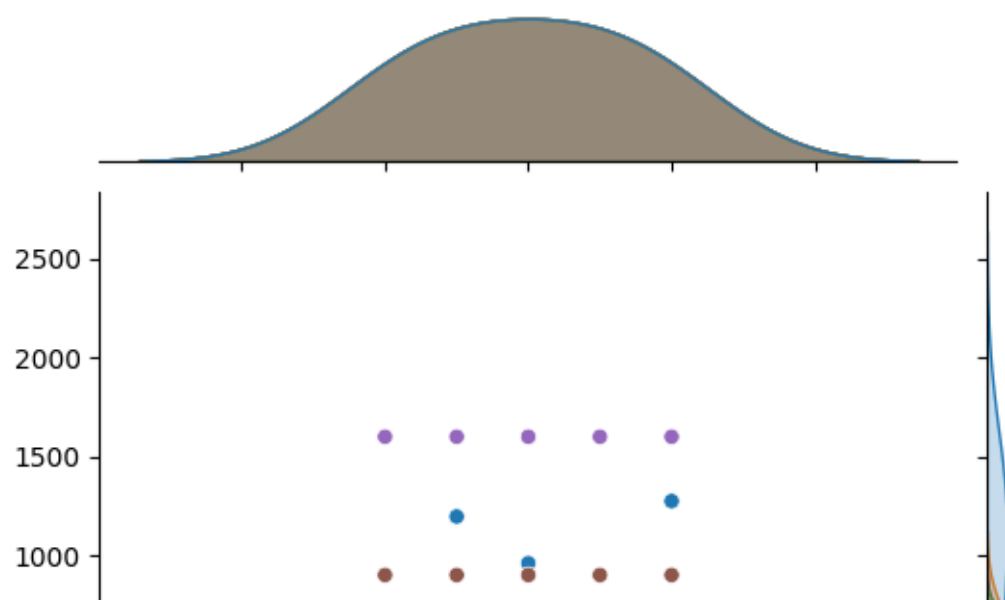


sns.displot(data=data)

<seaborn.axisgrid.FacetGrid at 0x7c132c407430>



sns.jointplot(data)
plt.show()

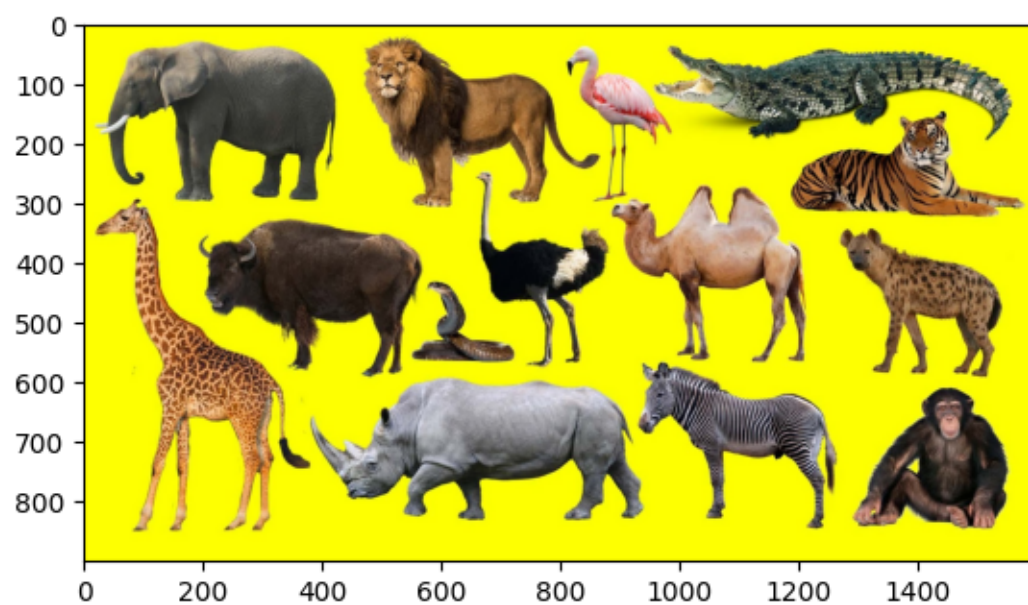


```
import matplotlib.image as img
from sklearn.model_selection import train_test_split
```

```
testing=img.imread("/content/animals.jpg")
```

```
plt.imshow(testing)
```

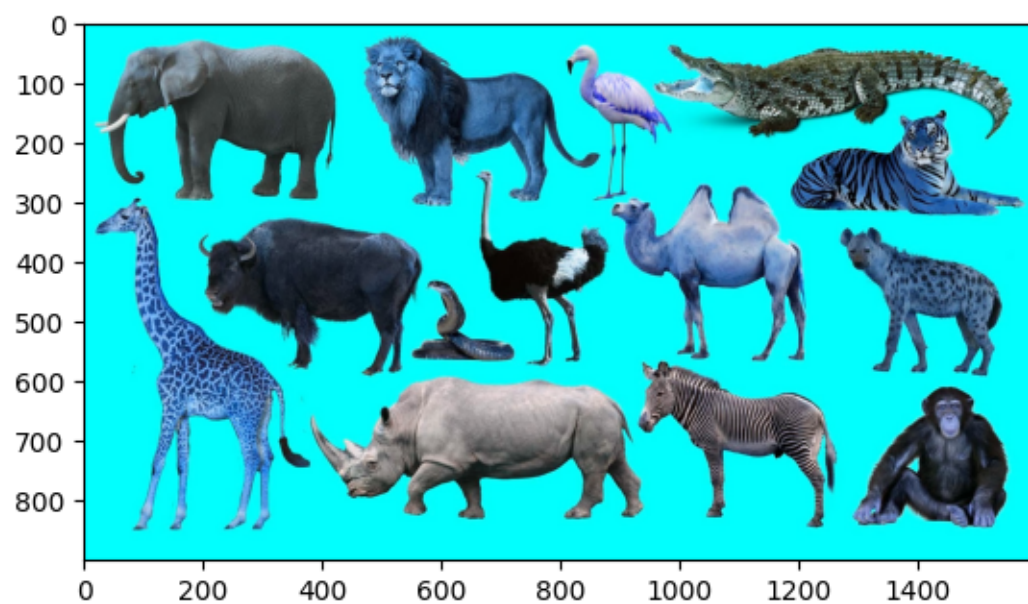
<matplotlib.image.AxesImage at 0x7c1324bc4910>



```
Start_point=(4,4)
End_point=(220,220)
color=(255,0,0)
thickness=9
```

```
testing=cv2.cvtColor(testing,cv2.COLOR_BGR2RGB)
plt.imshow(testing)
```

<matplotlib.image.AxesImage at 0x7c1322a44a00>



```
gray=cv2.cvtColor(testing,cv2.COLOR_RGB2GRAY)
plt.imshow(gray,data='gray',vmin=0,vmax=255)
```

<matplotlib.image.AxesImage at 0x7c13220dd0c0>



```
gray=cv2.cvtColor(testing,cv2.COLOR_RGB2GRAY)
plt.imshow(gray,cmap='gray',vmin=0,vmax=255)
```

<matplotlib.image.AxesImage at 0x7c1324ba45b0>

