Task

You are required to build a module having these functions:
Scatter plots are important in machine learning because they can show the extent of correlation, if any,
between the values of observed quantities or phenomena (called variables). If no correlation exists
between the variables, the points appear randomly scattered on the coordinate plane. If a large correlation
exists, the points concentrate near a straight line. Scatter plots are useful data visualization tools for
illustrating a trend. Here you are required to plot scatter plot between different features of human and
cats. Please note that all the scatter plot must be well defined in terms of charts elements.
Task: Read given cat_dog.csv file into dataframe.
Display different scatterplots between all features.
Write down the analysis at the end.

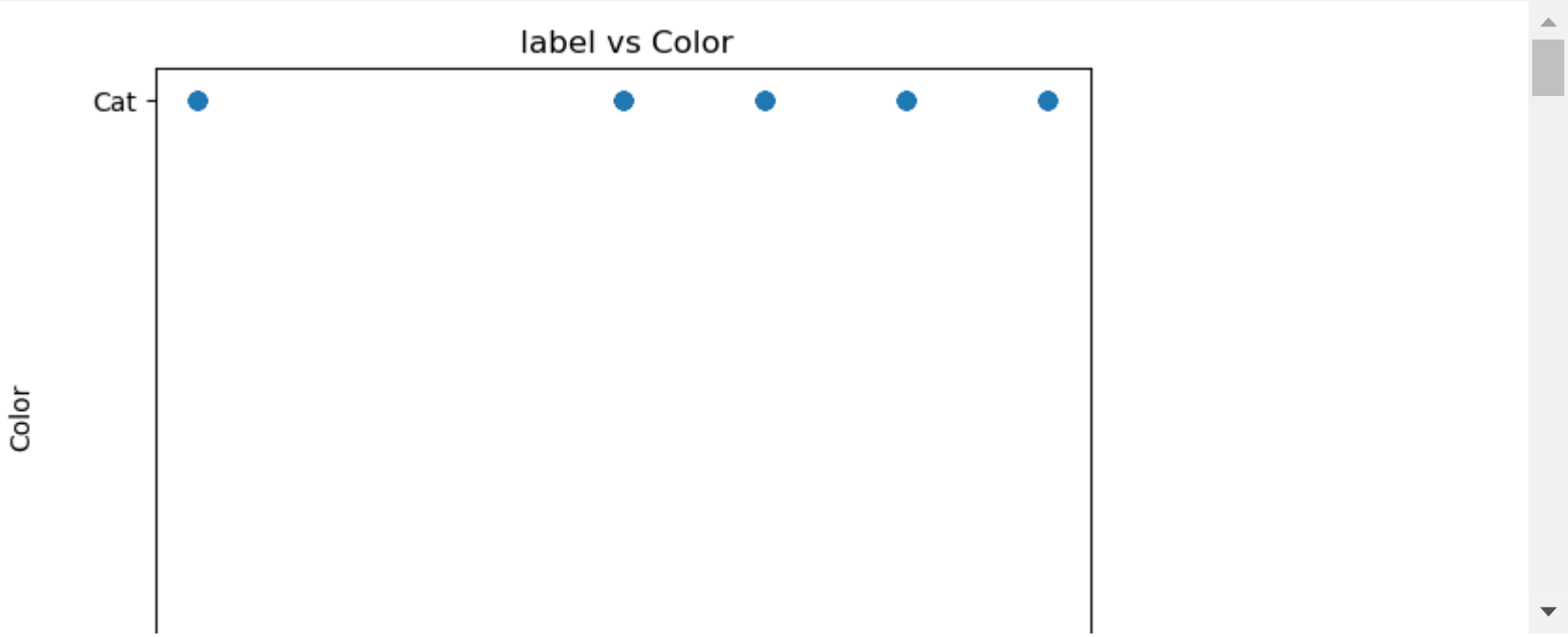
In [13]:
```
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
```

In [3]:
```
data = pd.read_csv("../DataSets/Cat_human_New (1).csv")
data.head()
```

Out[3]:

	Color	Eye_color	Height	Legs	Moustache	Tail	Weight	label
0	black	black	5.14	2	No	No	70.0	human
1	dark_brown	brown	6.80	2	No	No	64.4	human
2	light_brown	brown	5.00	2	Yes	No	64.8	human
3	light_brown	blue	5.90	2	No	No	78.8	human
4	light_brown	blue	6.56	2	No	No	73.2	human

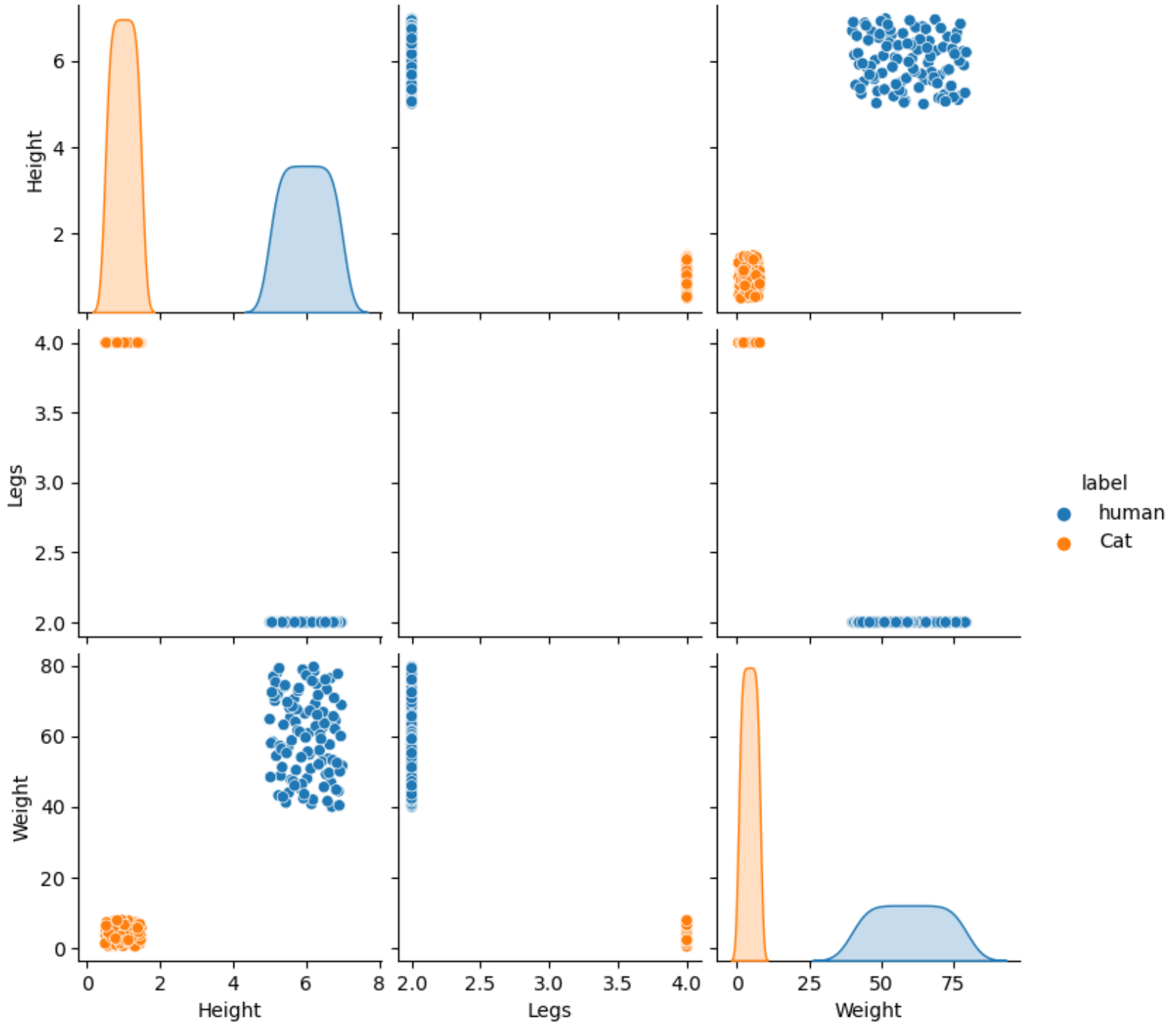
In [11]:
```
for x in data.columns:
    if x == "label":
        break
    plt.scatter(data = data , x = x,y="label")
    plt.title(f" label vs {x}")
    plt.xlabel("Label")
    plt.ylabel(f"{x}")
    plt.show()
```



In [12]:
```
## Pair plot
```

In [20]:
```
sns.pairplot(data= data,hue='label',kind='scatter')
```

Out[20]:
```
<seaborn.axisgrid.PairGrid at 0x2a8f01a7310>
```


Height
Legs
Weight
label
human
Cat
0
2
4
6
8
2.0
2.5
3.0
3.5
4.0
0
25
50
75
0
20
40
60
80

In [ ]: