#### untitled6

July 25, 2023

#### 1 Data visualization

```
[]: import seaborn as sns import matplotlib.pyplot as plt
```

### 2 Step 2 load data set

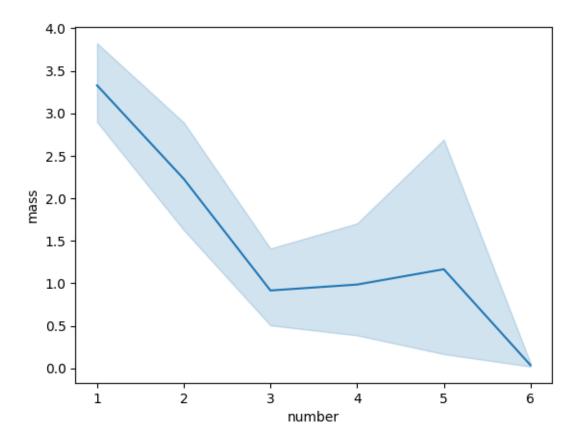
```
[]: planets=sns.load_dataset("planets")
planets.head()
```

```
[]:
                                 orbital\_period
                 method number
                                                   mass
                                                         distance
                                                                   year
     O Radial Velocity
                                        269.300
                                                   7.10
                                                            77.40
                              1
                                                                   2006
                                                   2.21
     1 Radial Velocity
                              1
                                        874.774
                                                            56.95
                                                                   2008
     2 Radial Velocity
                              1
                                        763.000
                                                   2.60
                                                            19.84
                                                                   2011
     3 Radial Velocity
                              1
                                        326.030
                                                 19.40
                                                           110.62
                                                                   2007
     4 Radial Velocity
                              1
                                        516.220
                                                 10.50
                                                           119.47
                                                                   2009
```

## 3 step-3 plot a graph

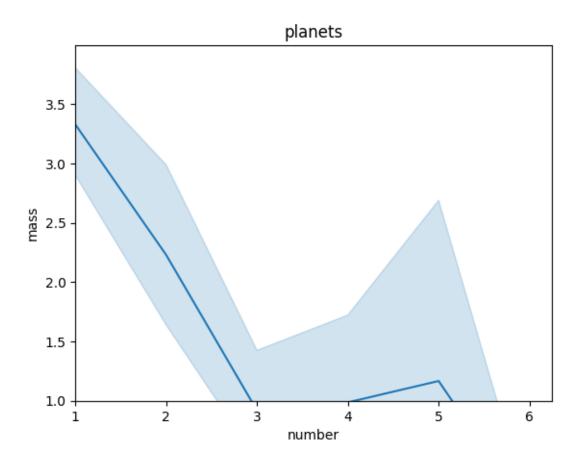
```
[]: sns.lineplot(x="number",y="mass",data=planets)
```

```
[]: <Axes: xlabel='number', ylabel='mass'>
```

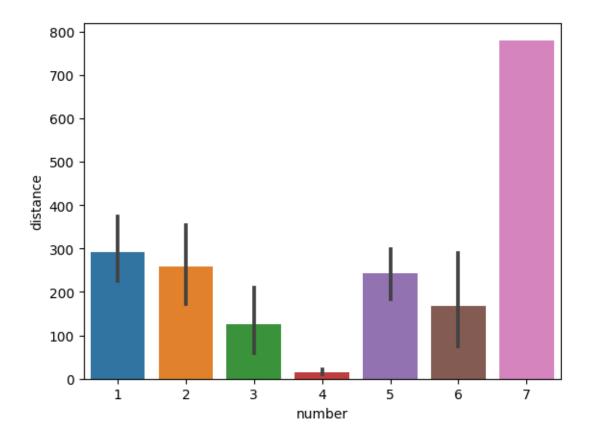


```
[]: sns.lineplot(x="number",y="mass",data=planets)
plt.xlim(1)
plt.ylim(1)
plt.title("planets")
```

[]: Text(0.5, 1.0, 'planets')



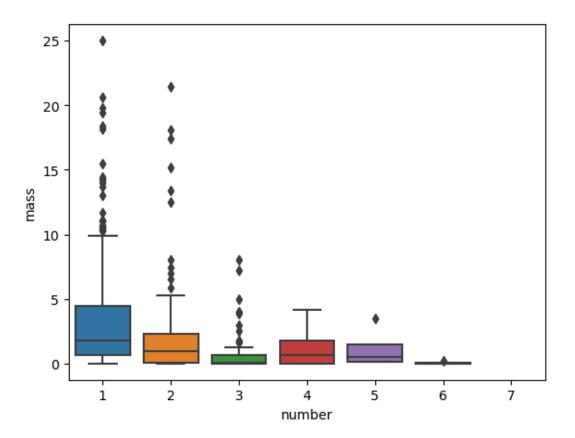
```
#Bar plot
[]: sns.barplot(x="number",y="distance",data=planets)
[]: <Axes: xlabel='number', ylabel='distance'>
```



# 4 Box plot

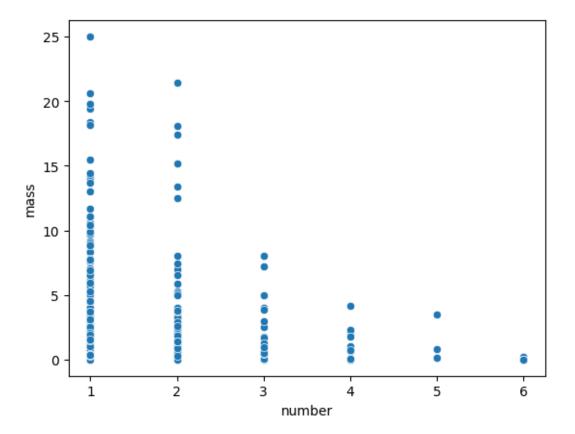
```
[]: sns.boxplot(x="number",y="mass",data=planets)
```

[]: <Axes: xlabel='number', ylabel='mass'>



```
[]: sns.scatterplot(x="number",y="mass",data=planets)
```

[]: <Axes: xlabel='number', ylabel='mass'>



 $\#\mathrm{Cat}$  plot

[]: sns.catplot(x="mass",y="orbital\_period",data=pl,color= "#7CFC00")

[]: <seaborn.axisgrid.FacetGrid at 0x7f6bd34d2920>

