

## BOX PLOT LECTURE 11 / 12 and different plots weblink

### Time series plot using example of data set of dots

```
In [1]: import seaborn as sns
import pandas as pd
import numpy as np

nuqta = sns.load_dataset("dots")
nuqta.head(5)
# pehli 5 rows dekhny k lye head command use karengy
```

```
Out[1]:
```

	align	choice	time	coherence	firing_rate
0	dots	T1	-80	0.0	33.189967
1	dots	T1	-80	3.2	31.691726
2	dots	T1	-80	6.4	34.279840
3	dots	T1	-80	12.8	32.631874
4	dots	T1	-80	25.6	35.060487

#### - LINE PLOT

```
In [2]: #defining a pelette
import seaborn as sns
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt

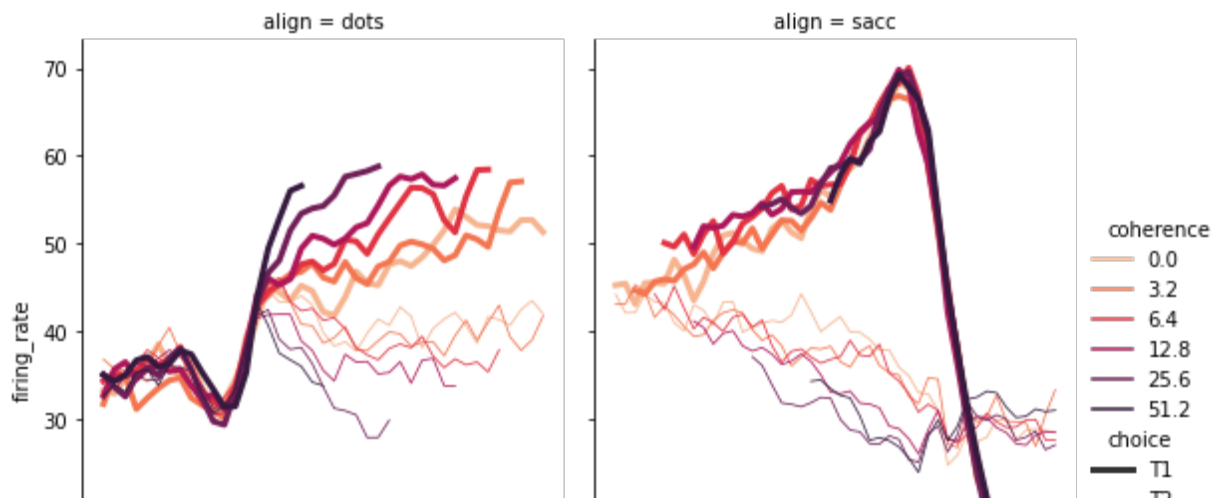
nuqta =sns.load_dataset("dots")

p = sns.color_palette('rocket_r')

#LINE PLOT

sns.relplot(data=nuqta , x="time", y="firing_rate", hue="coherence", size="cho
            col="align", kind="line" , size_order=["T1" , "T2"] ,
            height=5, aspect=.75 , facet_kws=dict(sharex=False) , palette=p )
```

```
Out[2]: <seaborn.axisgrid.FacetGrid at 0x192ea677bb0>
```



we can use this link to find script for different kinds of plot and we can also use link of plotly for animated plots

<https://seaborn.pydata.org/examples/index.html>

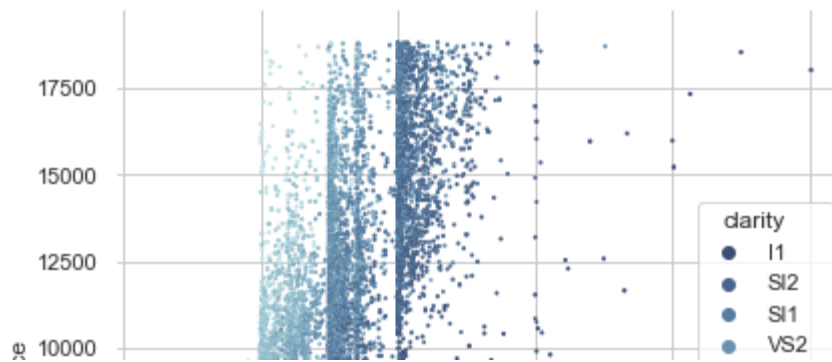
<https://plotly.com/python/plotly-express/>

```
In [4]: import seaborn as sns
import matplotlib.pyplot as plt
sns.set_theme(style="whitegrid")

# Load the example diamonds dataset
diamonds = sns.load_dataset("diamonds")

# Draw a scatter plot while assigning point colors and sizes to different
# variables in the dataset
f, ax = plt.subplots(figsize=(6.5, 6.5))
sns.despine(f, left=True, bottom=True)
clarity_ranking = ["I1", "SI2", "SI1", "VS2", "VS1", "VVS2", "VVS1", "IF"]
sns.scatterplot(x="carat", y="price",
                hue="clarity", size="depth",
                palette="ch:r=-.2,d=.3_r",
                hue_order=clarity_ranking,
                sizes=(1, 8), linewidth=0,
                data=diamonds, ax=ax)
```

Out[4]: <AxesSubplot:xlabel='carat', ylabel='price'>

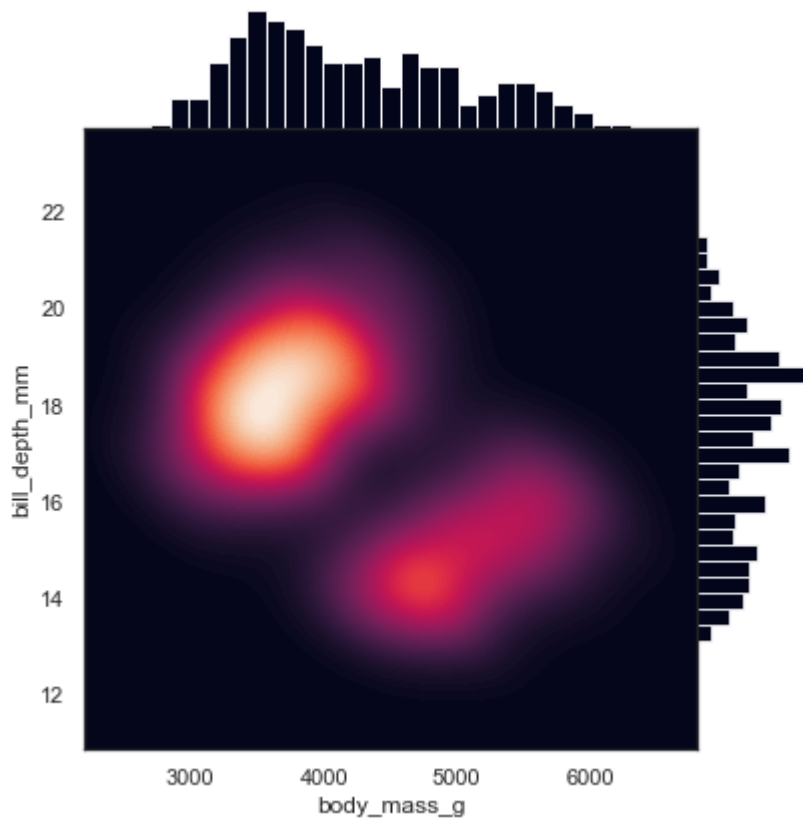


```
In [5]: import seaborn as sns
sns.set_theme(style="white")

df = sns.load_dataset("penguins")

g = sns.JointGrid(data=df, x="body_mass_g", y="bill_depth_mm", space=0)
g.plot_joint(sns.kdeplot,
             fill=True, clip=((2200, 6800), (10, 25)),
             thresh=0, levels=100, cmap="rocket")
g.plot_marginals(sns.histplot, color="#03051A", alpha=1, bins=25)
```

Out[5]: <seaborn.axisgrid.JointGrid at 0x192eba17670>



In [ ]: