

line plot with multifacets

```
In [98]: import seaborn as sns
import matplotlib as plt
import numpy as np
import pandas as pd

# Load dataset and head
noqta=sns.load_dataset("dots")
noqta
```

```
Out[98]:
```

	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
...
843	sacc	T2	300	3.2	33.281734
844	sacc	T2	300	6.4	27.583979
845	sacc	T2	300	12.8	28.511530
846	sacc	T2	300	25.6	27.009804
847	sacc	T2	300	51.2	30.959302

848 rows × 5 columns

```
In [100... import seaborn as sns
import matplotlib as plt
import numpy as np
import pandas as pd

# Load dataset and head
noqta=sns.load_dataset("dots")
noqta.head()
```

```
Out[100]:
```

	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

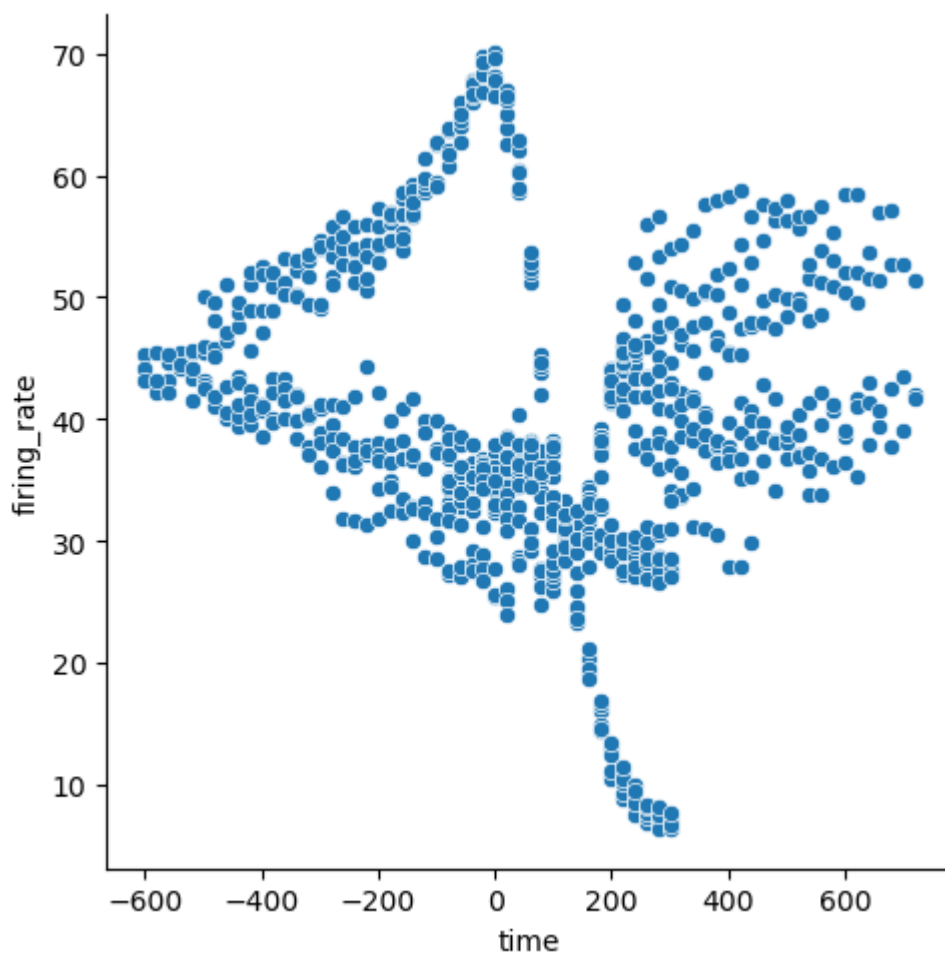
```
In [54]: import seaborn as sns
import matplotlib as plt
import numpy as np
import pandas as pd

# Load dataset
noqta=sns.load_dataset("dots")

# defining a color palette for line plot with multifacet
palette=sns.color_palette("rocket_r")

# draw line plot
sns.relplot(x="time", y="firing_rate", data=noqta)
```

```
Out[54]: <seaborn.axisgrid.FacetGrid at 0x1f82c76bb90>
```



Coherence means quality of flow or consistency

```
In [59]: import seaborn as sns
import matplotlib as plt
import numpy as np
import pandas as pd

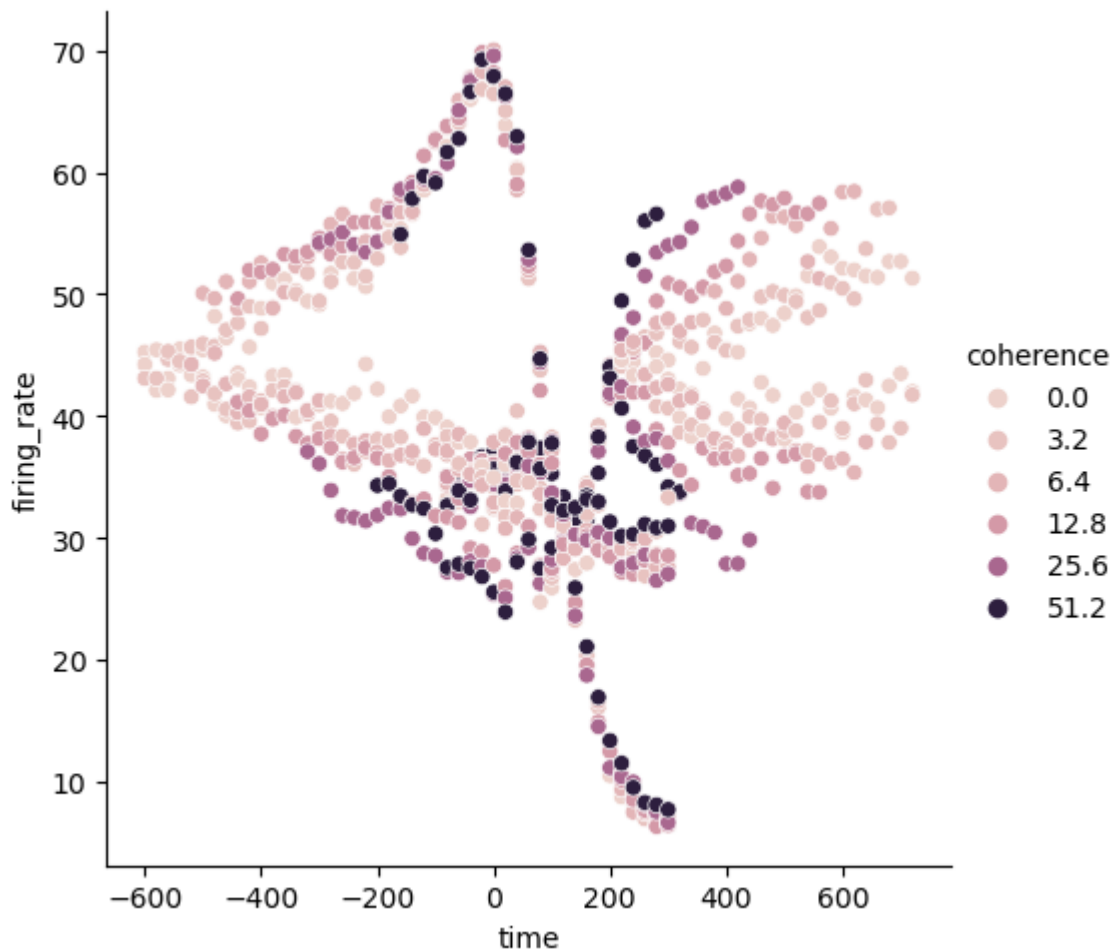
# Load dataset
noqta=sns.load_dataset("dots")

# defining a color palette for line plot with multifacet
```

```
palette=sns.color_palette("rocket_r")

# draw line plot
sns.relplot(x="time", y="firing_rate", hue="coherence",
            data=noqta)
```

Out[59]: <seaborn.axisgrid.FacetGrid at 0x1f8294baa90>



size as Choice

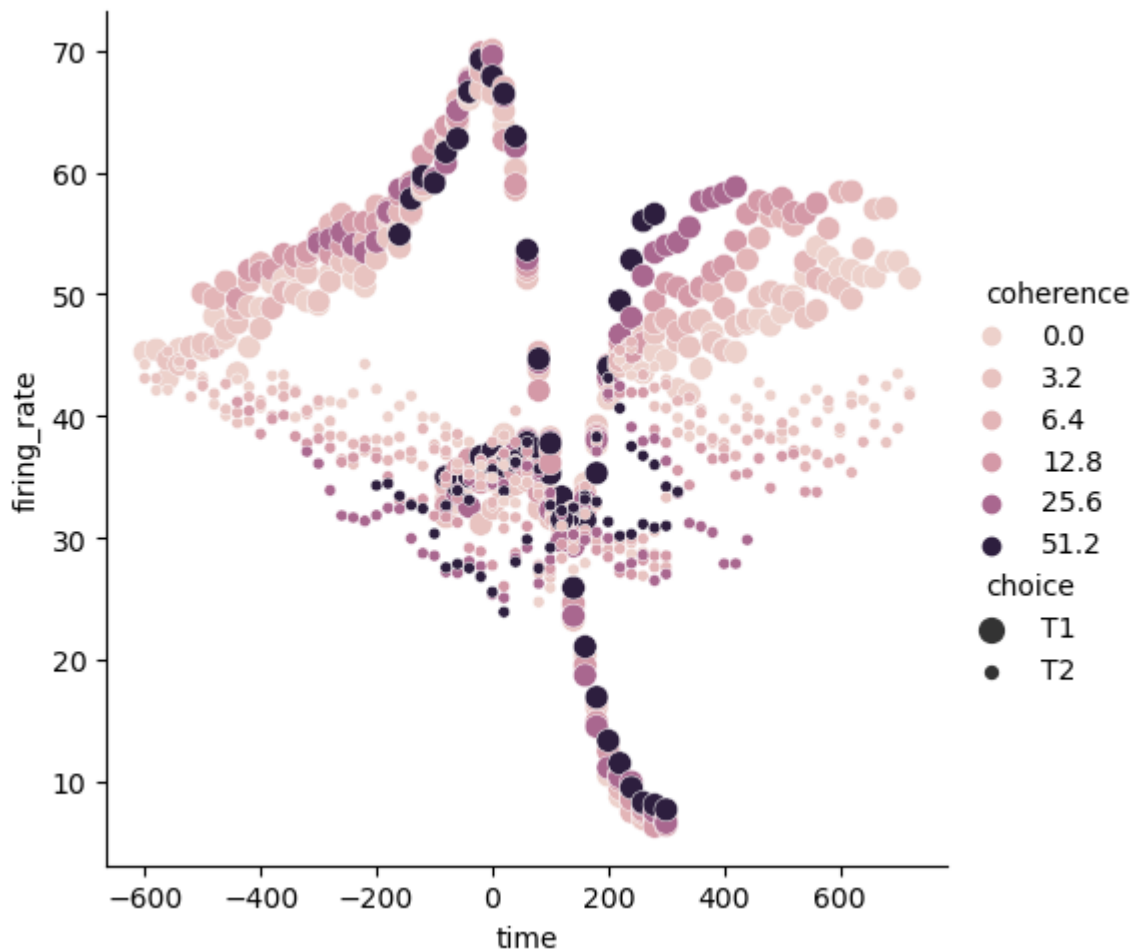
```
In [63]: import seaborn as sns
import matplotlib as plt
import numpy as np
import pandas as pd

# Load dataset
noqta=sns.load_dataset("dots")

# defining a color palette for line plot with multifacet
palette=sns.color_palette("rocket_r")

# draw line plot
sns.relplot(x="time", y="firing_rate", hue="coherence",
            data=noqta, size="choice")
```

Out[63]: <seaborn.axisgrid.FacetGrid at 0x1f8299f5bd0>



col=Align

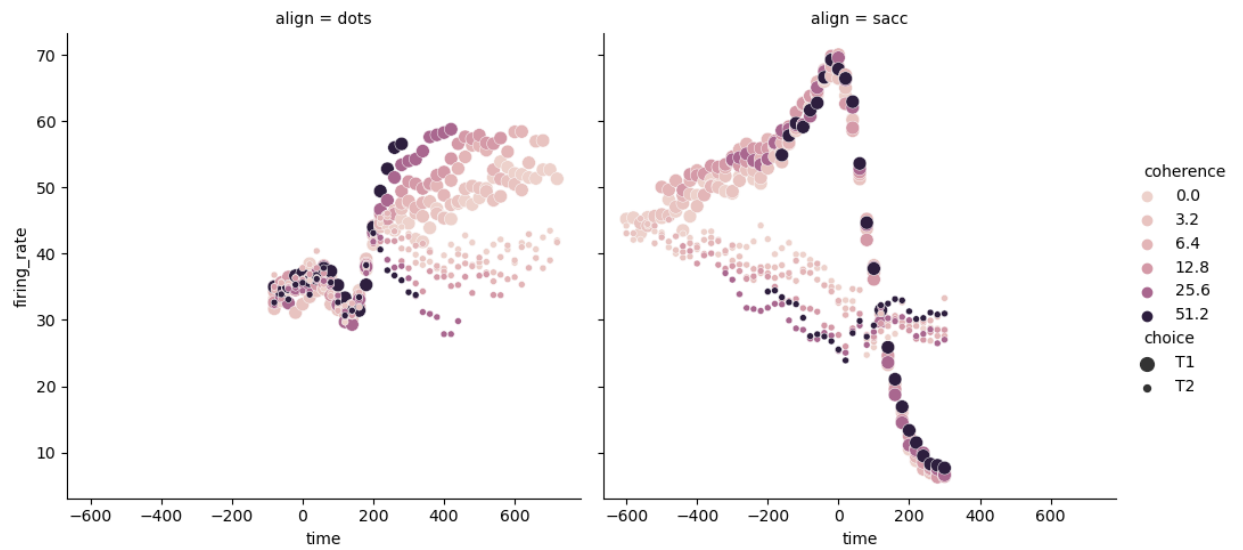
```
In [66]: import seaborn as sns
import matplotlib as plt
import numpy as np
import pandas as pd

# Load dataset
noqta=sns.load_dataset("dots")

# defining a color palette for line plot with multifacet
palette=sns.color_palette("rocket_r")

# draw line plot
sns.relplot(x="time", y="firing_rate", hue="coherence",
            data=noqta, size="choice", col="align")
```

Out[66]: <seaborn.axisgrid.FacetGrid at 0x1f82c2ffb90>



Kind=line

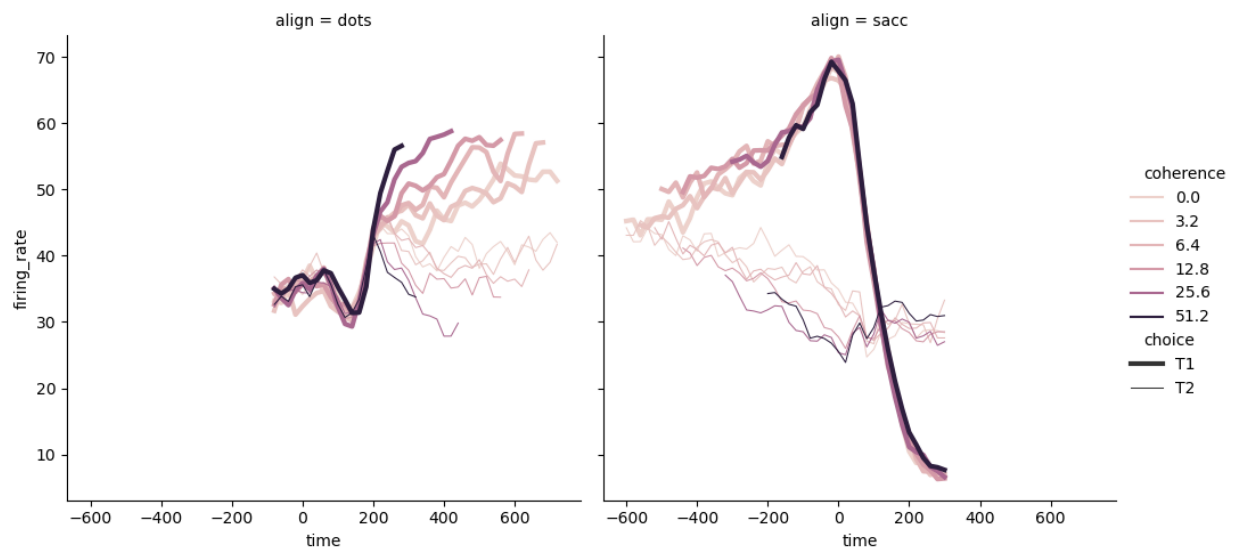
```
In [68]: import seaborn as sns
import matplotlib as plt
import numpy as np
import pandas as pd

# Load dataset
noqta=sns.load_dataset("dots")

# defining a color palette for line plot with multifacet
palette=sns.color_palette("rocket_r")

# draw line plot
sns.relplot(x="time", y="firing_rate", hue="coherence",
            data=noqta, size="choice", col="align", kind="line")
```

Out[68]: <seaborn.axisgrid.FacetGrid at 0x1f82e862b90>



Size order= `

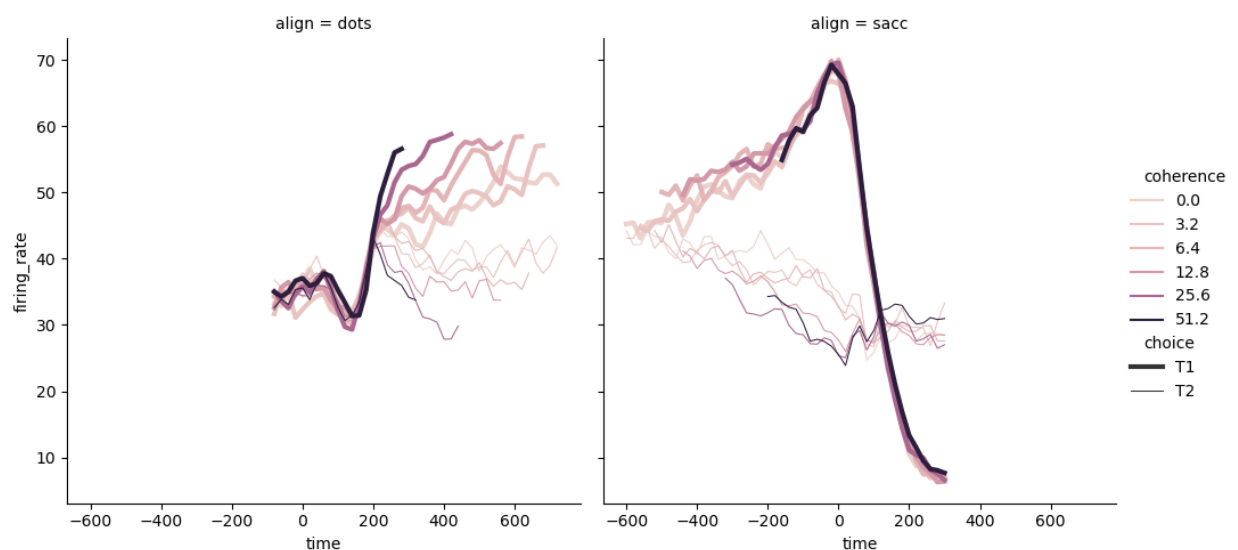
```
In [70]: import seaborn as sns
import matplotlib as plt
import numpy as np
import pandas as pd

# Load dataset
noqta=sns.load_dataset("dots")

# defining a color palette for line plot with multifacet
palette=sns.color_palette("rocket_r")

# draw line plot
sns.relplot(x="time", y="firing_rate", hue="coherence",
            data=noqta, size="choice", col="align",
            kind="line", size_order=["T1", "T2"])
```

Out[70]: <seaborn.axisgrid.FacetGrid at 0x1f82ed19310>



palette

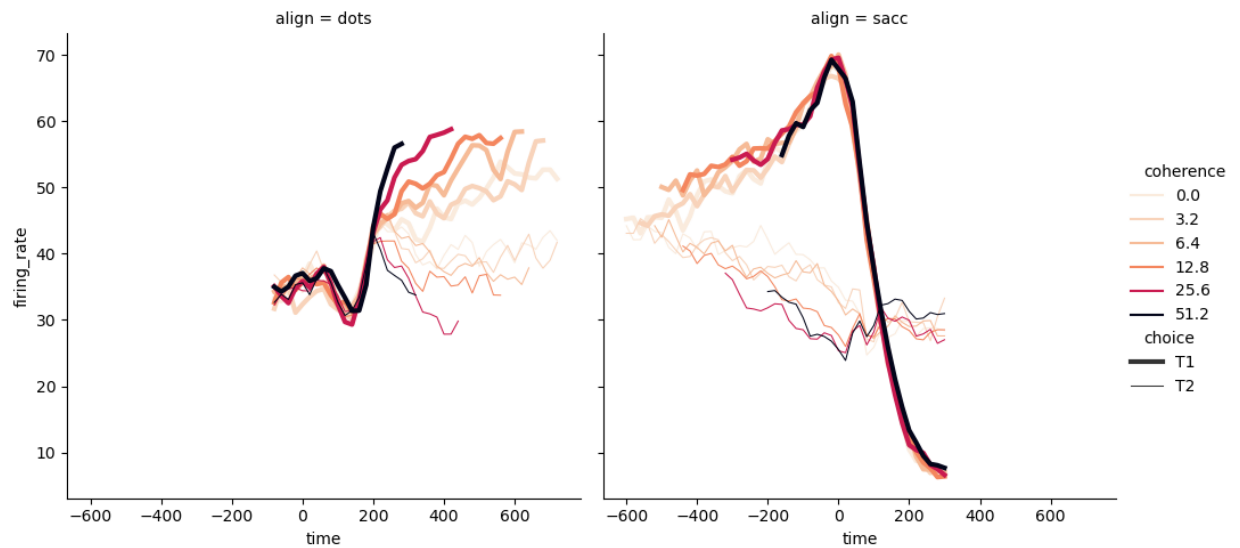
```
In [76]: import seaborn as sns
import matplotlib as plt
import numpy as np
import pandas as pd

# Load dataset
noqta=sns.load_dataset("dots")

# defining a color palette for line plot with multifacet
palette=sns.color_palette("rocket_r")

# draw line plot
sns.relplot(x="time", y="firing_rate", hue="coherence",
            data=noqta, size="choice", col="align",
            kind="line", size_order=["T1", "T2"],
            palette="rocket_r")
```

Out[76]: <seaborn.axisgrid.FacetGrid at 0x1f82f7fd650>



height means intensity

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

# Load dataset
noqta=sns.load_dataset("dots")

# defining a color palette for line plot with multifacet
palette=sns.color_palette("rocket_r")

# draw line plot
sns.relplot(x="time", y="firing_rate", hue="coherence",
            data=noqta, size="choice", col="align",
            kind="line", size_order=["T1", "T2"],
            palette="rocket_r", height=5)
```

aspects

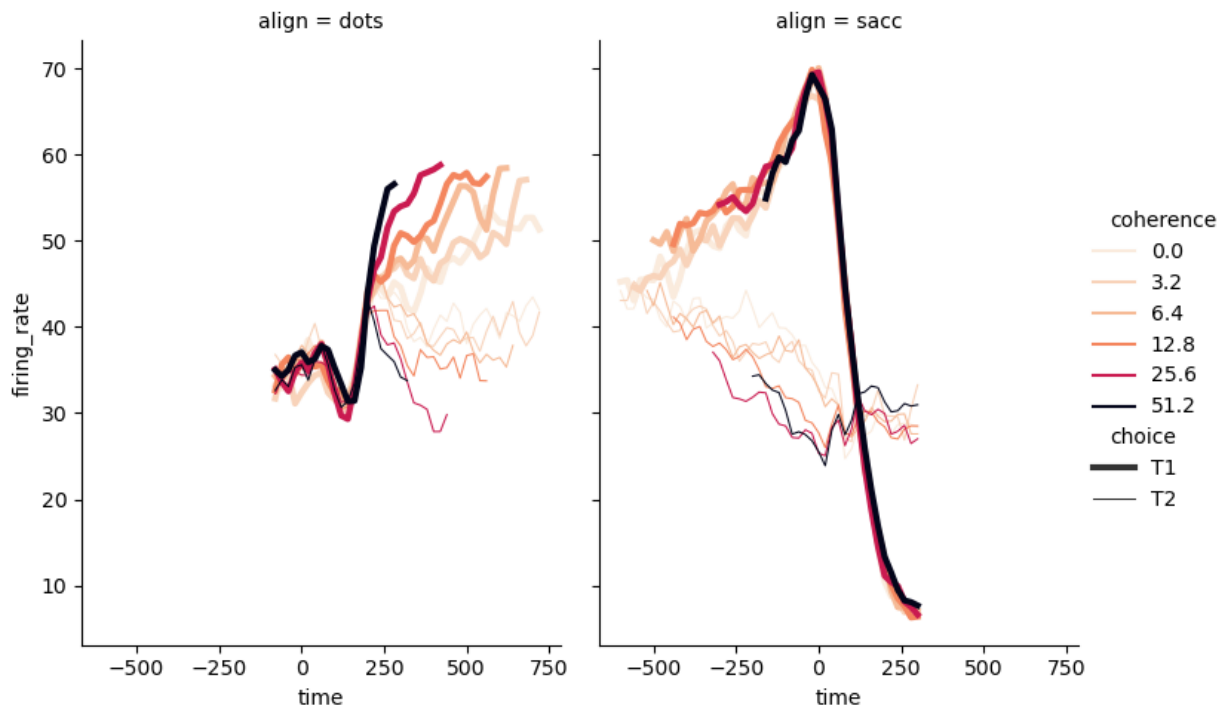
```
In [93]: import seaborn as sns
import matplotlib as plt
import numpy as np
import pandas as pd

# Load dataset
noqta=sns.load_dataset("dots")

# defining a color palette for line plot with multifacet
palette=sns.color_palette("rocket_r")

# draw line plot
sns.relplot(x="time", y="firing_rate", hue="coherence",
            data=noqta, size="choice", col="align",
            kind="line", size_order=["T1", "T2"],
            palette="rocket_r", height=5, aspect=0.75)
```

Out[93]: <seaborn.axisgrid.FacetGrid at 0x1f856912790>



facet_kws=dict(sharex=False)

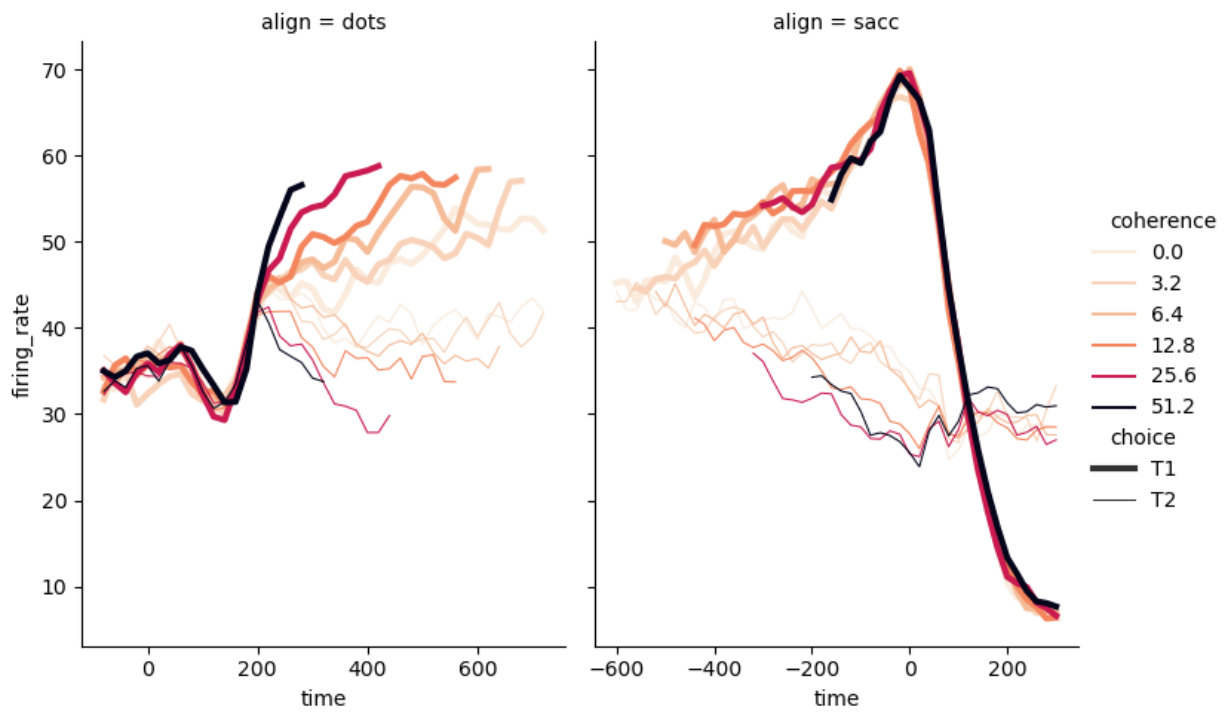
```
In [95]: import seaborn as sns
import matplotlib as plt
import numpy as np
import pandas as pd

# Load dataset
noqta=sns.load_dataset("dots")

# defining a color palette for line plot with multifacet
palette=sns.color_palette("rocket_r")

# draw line plot
sns.relplot(x="time", y="firing_rate", hue="coherence",
            data=noqta, size="choice", col="align",
            kind="line", size_order=["T1", "T2"],
            palette="rocket_r", height=5,
            aspect=0.75, facet_kws=dict(sharex=False))
```

Out[95]: <seaborn.axisgrid.FacetGrid at 0x1f857105910>



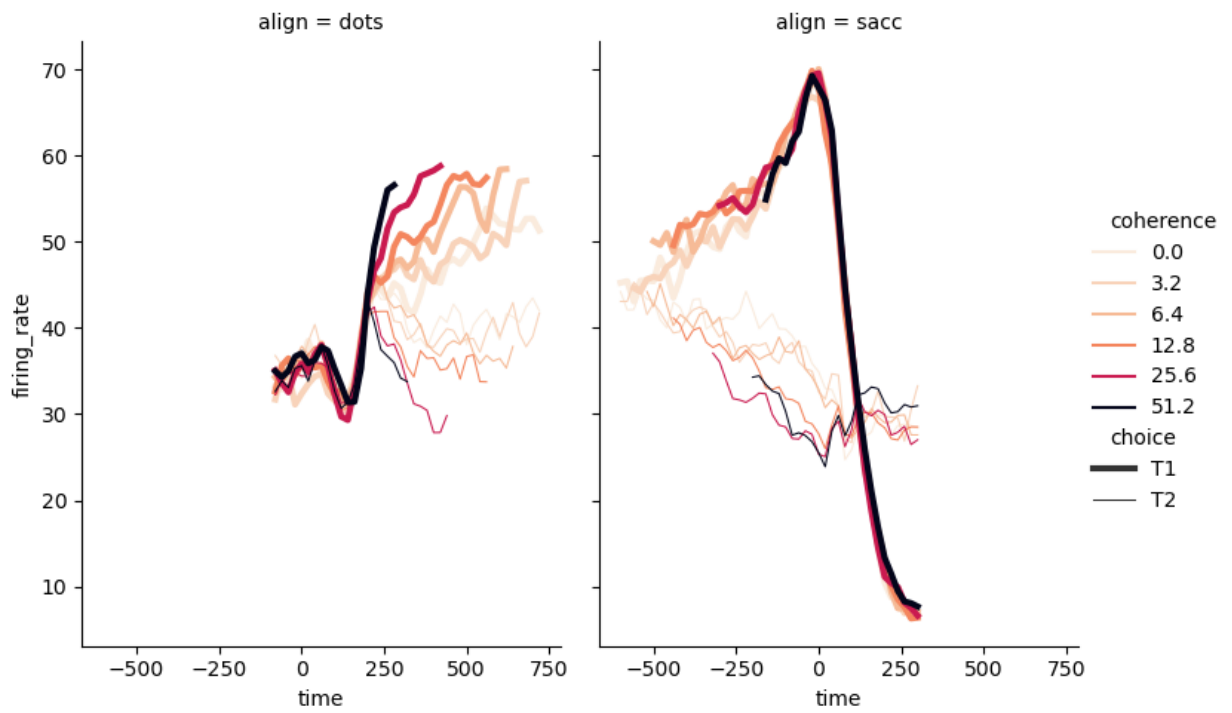
```
In [101]: import seaborn as sns
import matplotlib as plt
import numpy as np
import pandas as pd

b# Load dataset
noqta=sns.load_dataset("dots")

# defining a color palette for line plot with multifacet
palette=sns.color_palette("rocket_r")

# draw line plot
sns.relplot(x="time", y="firing_rate", hue="coherence",
            data=noqta, size="choice", col="align",
            kind="line", size_order=["T1", "T2"],
            palette="rocket_r", height=5,
            aspect=0.75, facet_kws=dict(sharex=True))
```

Out[101]: <seaborn.axisgrid.FacetGrid at 0x1f8510aecd0>



All different types of plot script are there...

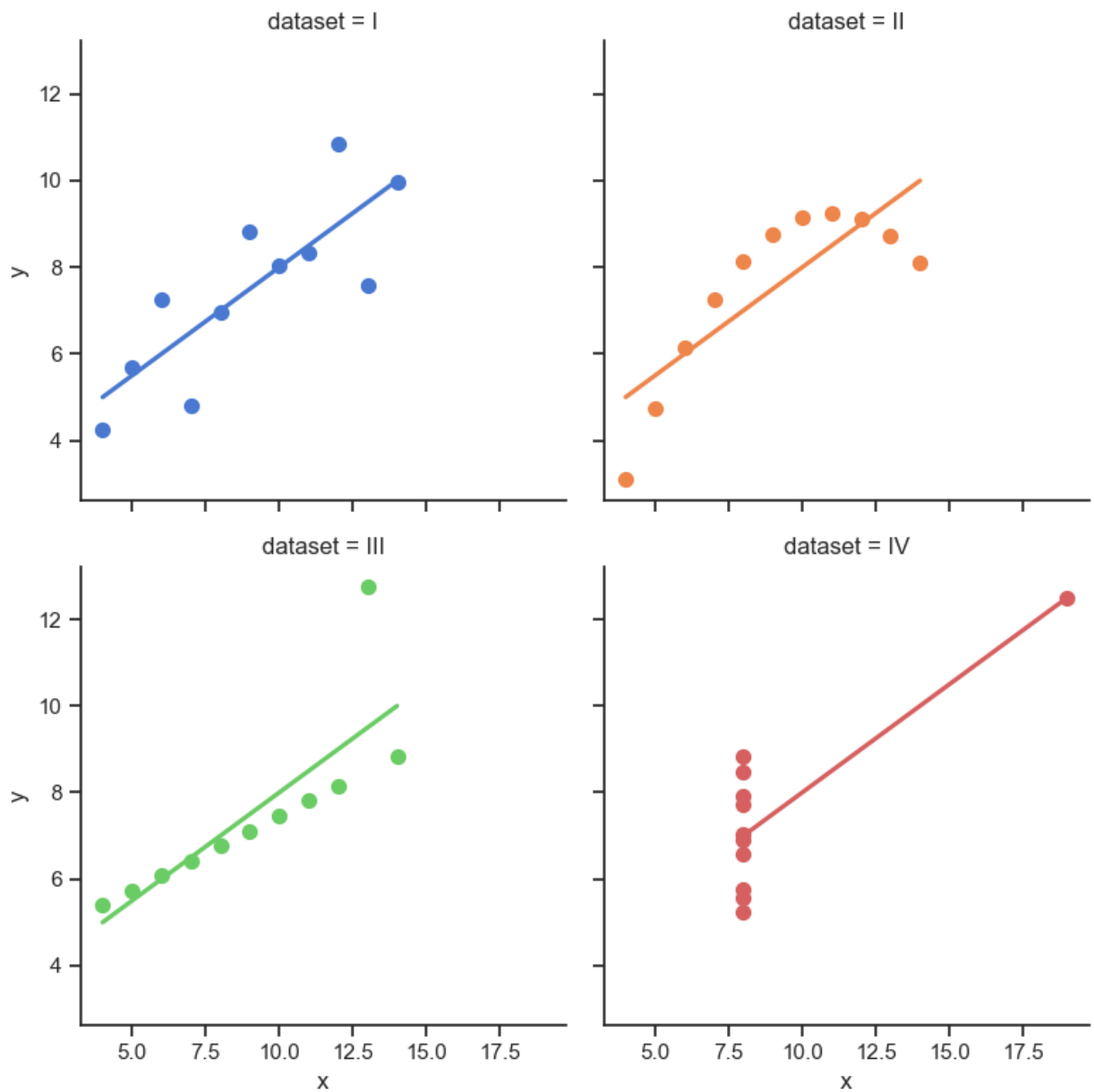
<https://seaborn.pydata.org/example>

```
In [1]: import seaborn as sns
sns.set_theme(style="ticks")

# Load the example dataset for Anscombe's quartet
df = sns.load_dataset("anscombe")

# Show the results of a linear regression within each dataset
sns.lmplot(
    data=df, x="x", y="y", col="dataset", hue="dataset",
    col_wrap=2, palette="muted", ci=None,
    height=4, scatter_kws={"s": 50, "alpha": 1}
)
```

Out[1]: <seaborn.axisgrid.FacetGrid at 0x1cc8efc8d50>

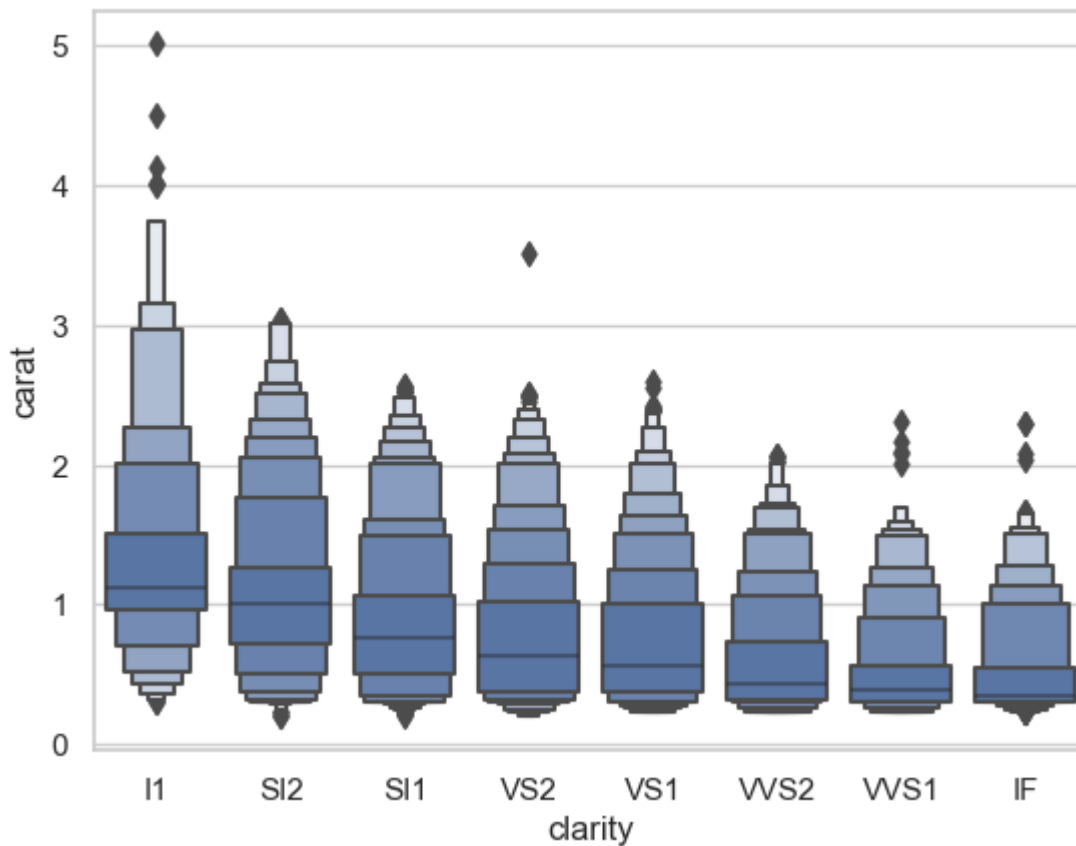


```
In [3]: import seaborn as sns
sns.set_theme(style="whitegrid")

diamonds = sns.load_dataset("diamonds")
clarity_ranking = ["I1", "SI2", "SI1", "VS2", "VS1", "VVS2", "VVS1", "IF"]

sns.boxenplot(x="clarity", y="carat",
              color="b", order=clarity_ranking,
              scale="linear", data=diamonds)
```

```
Out[3]: <Axes: xlabel='clarity', ylabel='carat'>
```

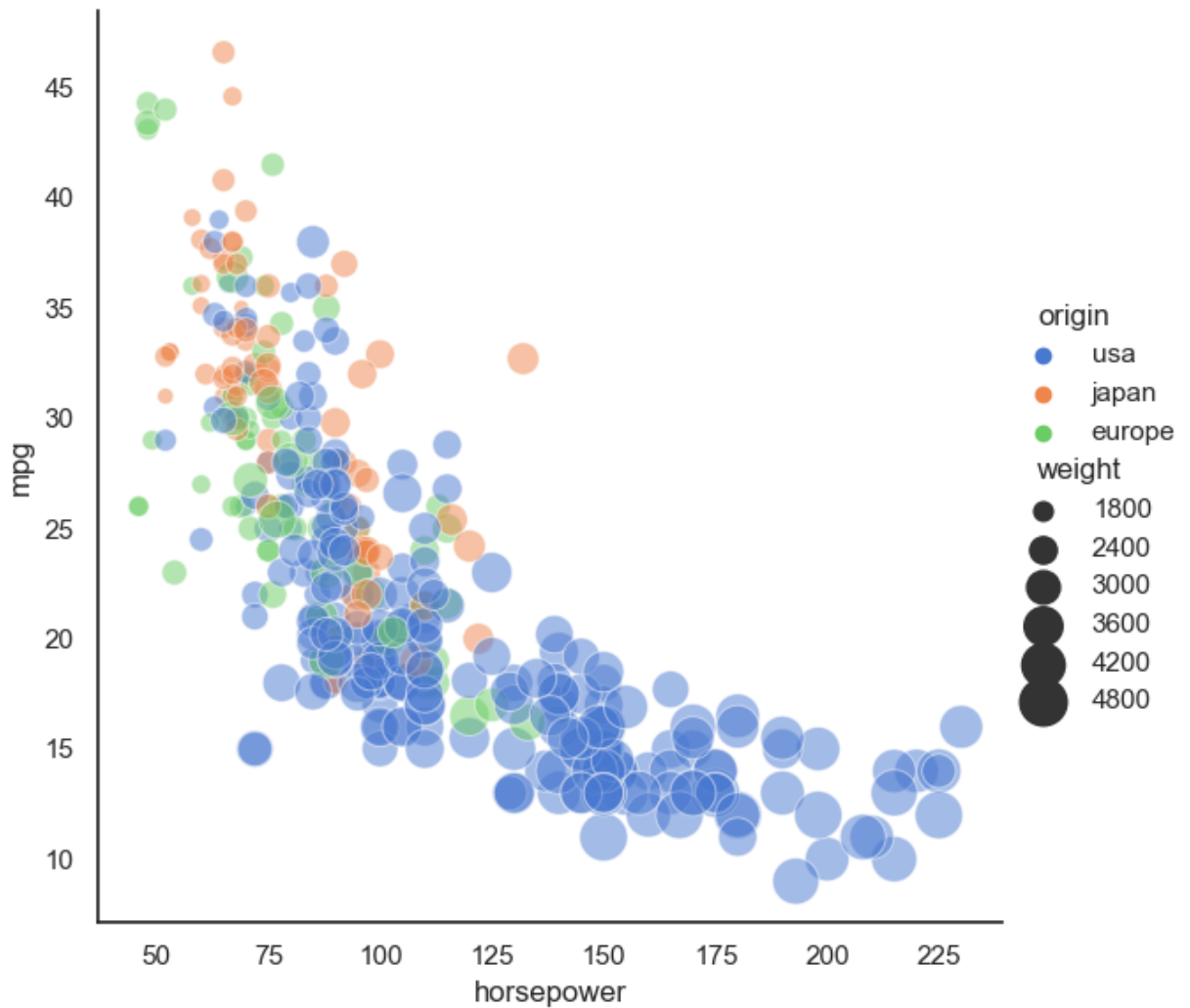


```
In [4]: import seaborn as sns
sns.set_theme(style="white")

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

# Plot miles per gallon against horsepower with other semantics
sns.relplot(x="horsepower", y="mpg", hue="origin", size="weight",
            sizes=(40, 400), alpha=.5, palette="muted",
            height=6, data=mpg)
```

```
Out[4]: <seaborn.axisgrid.FacetGrid at 0x1cc90472010>
```



```
In [6]: import seaborn as sns
import matplotlib as plt
import numpy as np
import pandas as pd

# Load dataset and head
noqta=sns.load_dataset("dots")
noqta.head()
```

```
Out[6]:
```

	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

```
In [9]: diamond=sns.load_dataset("diamonds")
diamond
```

Out[9]:

	carat	cut	color	clarity	depth	table	price	x	y	z
0	0.23	Ideal	E	SI2	61.5	55.0	326	3.95	3.98	2.43
1	0.21	Premium	E	SI1	59.8	61.0	326	3.89	3.84	2.31
2	0.23	Good	E	VS1	56.9	65.0	327	4.05	4.07	2.31
3	0.29	Premium	I	VS2	62.4	58.0	334	4.20	4.23	2.63
4	0.31	Good	J	SI2	63.3	58.0	335	4.34	4.35	2.75
...
53935	0.72	Ideal	D	SI1	60.8	57.0	2757	5.75	5.76	3.50
53936	0.72	Good	D	SI1	63.1	55.0	2757	5.69	5.75	3.61
53937	0.70	Very Good	D	SI1	62.8	60.0	2757	5.66	5.68	3.56
53938	0.86	Premium	H	SI2	61.0	58.0	2757	6.15	6.12	3.74
53939	0.75	Ideal	D	SI2	62.2	55.0	2757	5.83	5.87	3.64

53940 rows × 10 columns

```
In [11]: diamond=sns.load_dataset("diamonds")
diamond.head()
```

Out[11]:

	carat	cut	color	clarity	depth	table	price	x	y	z
0	0.23	Ideal	E	SI2	61.5	55.0	326	3.95	3.98	2.43
1	0.21	Premium	E	SI1	59.8	61.0	326	3.89	3.84	2.31
2	0.23	Good	E	VS1	56.9	65.0	327	4.05	4.07	2.31
3	0.29	Premium	I	VS2	62.4	58.0	334	4.20	4.23	2.63
4	0.31	Good	J	SI2	63.3	58.0	335	4.34	4.35	2.75

there is no ranking in dots but ranking in diomend in 3rd one

you can adopt apni trf se

```
In [17]: import seaborn as sns
sns.set_theme(style="whitegrid")

noqta = sns.load_dataset("dots")
# clarity_ranking = ["I1", "SI2", "SI1", "VS2", "VS1", "VVS2", "VVS1", "IF"]

sns.boxenplot(x="choice", y="coherence",
              color="b",
              scale="linear", data=noqta)
```

Out[17]: <Axes: xlabel='choice', ylabel='coherence'>

