Data Visualization

```
from google.colab import drive
drive.mount('/content/drive')
```

```
import pandas as pd
import matplotlib as plt
import seaborn as sns

tips = sns.load_dataset("tips")
flights = sns.load_dataset("flights")
titanic = sns.load_dataset("titanic")
```

```
sns.get_dataset_names()
```

Simple Exercise, Flight

```
import pandas as pd
import seaborn as sns

flights = sns.load_dataset("flights")
```

```
flights.head()
```

```
sns.scatterplot(x='year',y='passengers',data=flights)
```

```
sns.lineplot(x= year ,y='passengers',data=flights)
```

```
flights_m=flights.groupby('year').mean('passengers')
flights_m.head()
```

```
# Slide
flights_m=flights.groupby('year').mean('passengers')
sns.lineplot(x= year ,y='passengers',data=flights_m)
```

```
# Slide
sns.lineplot(x= year ,y='passengers',hue='month',data=flights)
```

```
sns.scatterplot(x='year',y='passengers',data=flights, hue="month")
```

Simple Exercise, Tips

```
import pandas as pd
import seaborn as sns

tips = sns.load_dataset("tips")
```

```
tips.head()
```

```
sns.scatterplot(x='total_bill',y='tip',data=tips)
```

```
sns.scatterplot(x='total_bill',y='tip',data=tips, hue='sex')
```

```
sns.scatterplot(x='total_bill',y='tip',data=tips, hue='time')
```

```
sns.scatterplot(x='total_bill',y='tip',data=tips, hue='smoker')
```

```
sns.scatterplot(x='total_bill',y='tip',data=tips, hue='size')
```

```
# Slide
sns.histplot(x= tip',data=tips)
```

```
# Slide
sns.histplot(x= tip',hue= smoker',data=tips)
```

```
sns.histplot(x= total_bill',y= tip',data=tips)
```

```
titanic.head()
```

```
# Slide
sns.barplot(x='class ,y='survived',
            data=titanic)
```

```
# Slide
sns.barplot(x='class ,y='survived',
            hue='sex ,data=titanic,
            dodge=True)
```

```
# Slide
sns.barplot(x='survived',y='class', data=titanic)
```

```
# Slide
sns.barplot(x='survived',y='class',hue='sex',data=titanic, dodge=True)
```

```
# Slide
sns.boxplot(x='day", y="tip", data=tips)
```

```
# Slide
sns.boxplot(x='day", y="tip", data=tips, hue = "sex )
```

```
sns.boxplot(x='day", y="tip", data=tips, hue = "smoker")
```

```
sns.boxplot(x='day", y="tip", data=tips, hue = "sex )
```

```
# Slide
sns.pairplot(data=tips)
```

```
# Slide
sns.pairplot(data=tips, hue='time', diag_kind='hist')
```

```
# Slide
sns.jointplot(x='total_bill',y='tip', data=tips)
```

```
# Slide
sns.jointplot(x='total_bill',y='tip', hue='time', data=tips, kind='hist')
```