

# Data Analysis summary

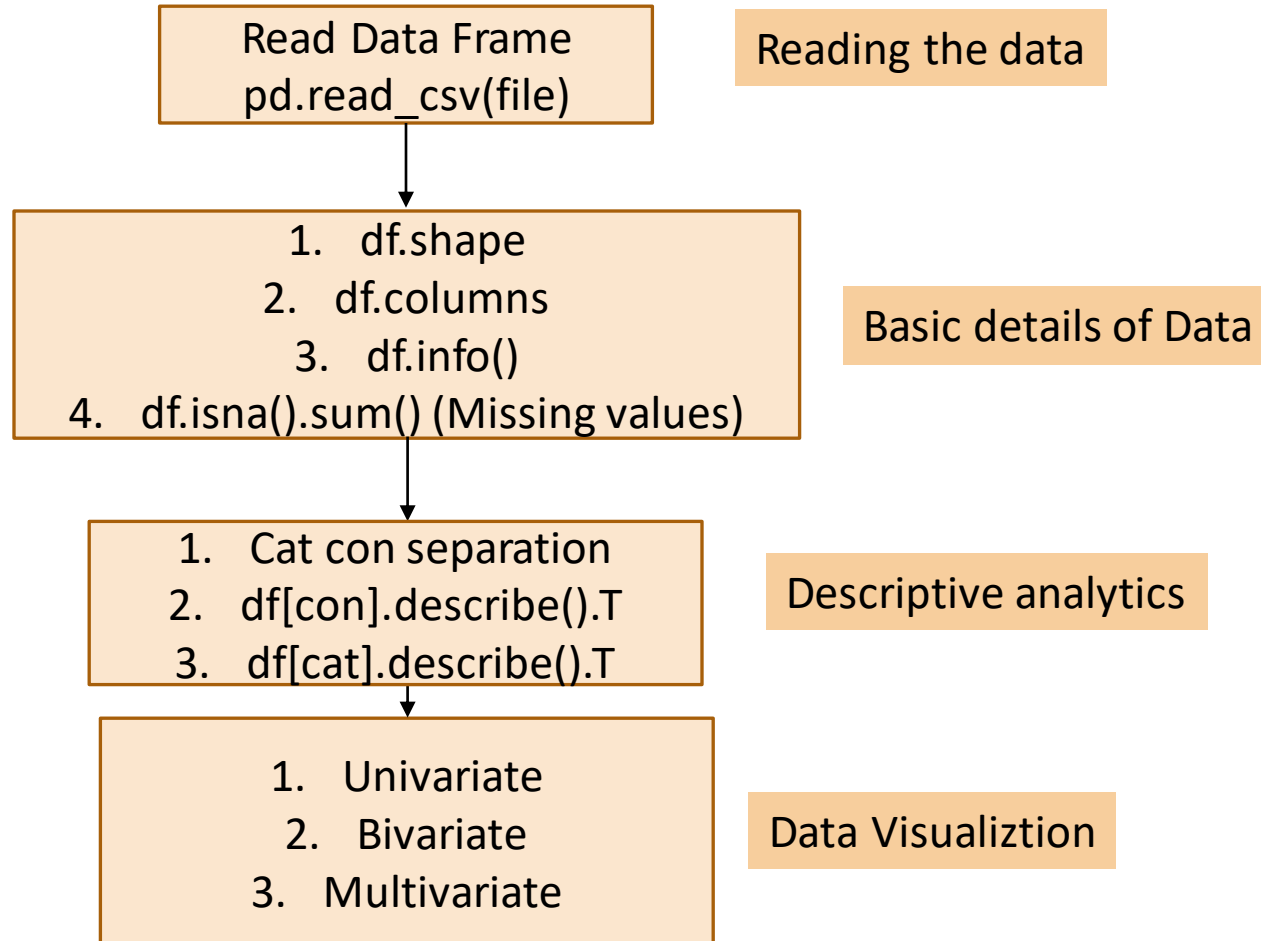
---

UTKARSH GAIKWAD

CLASS STARTING SHARP AT 6:05 PM

# Steps to follow in Exploratory data analysis

---

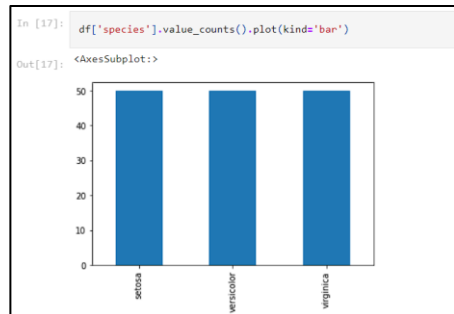


# Univariate analysis

---

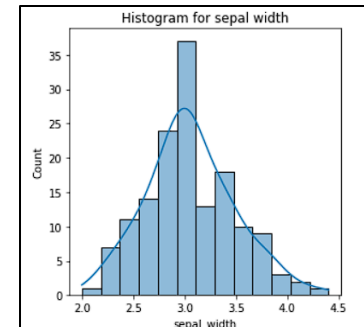
Categorical Features  
(Containing Text)

Countplot  
`df.value_counts()`  
`df.value_counts().plot(kind='bar')`



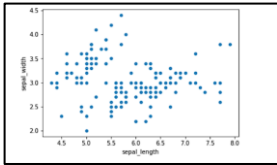
Continuous Features  
(Numerical Features)

Histogram  
`import seaborn as sns`  
`sns.histplot(data=df,x='column_name',kde=True)`



# Bivariate Analysis

Continuous vs Continuous



Scatterplot

Import seaborn

```
sns.scatterplot(data=df, x='c1',  
y='c2')
```

Categorical vs Continuous

Boxplot

Import seaborn as sns

```
sns.boxplot(data=df, x='c1', y = 'c2')
```

Categorical vs Categorical

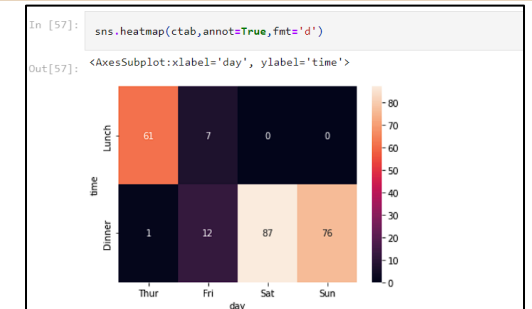
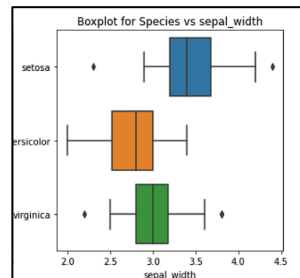
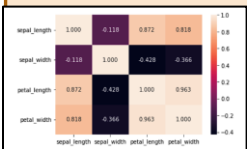
Crosstab

```
ctab =pd.crosstab(df['cat1'], df['cat2'])  
sns.heatmap(ctab, annot=True, fmt='d')
```

Correlation heatmap

Import seaborn as sns

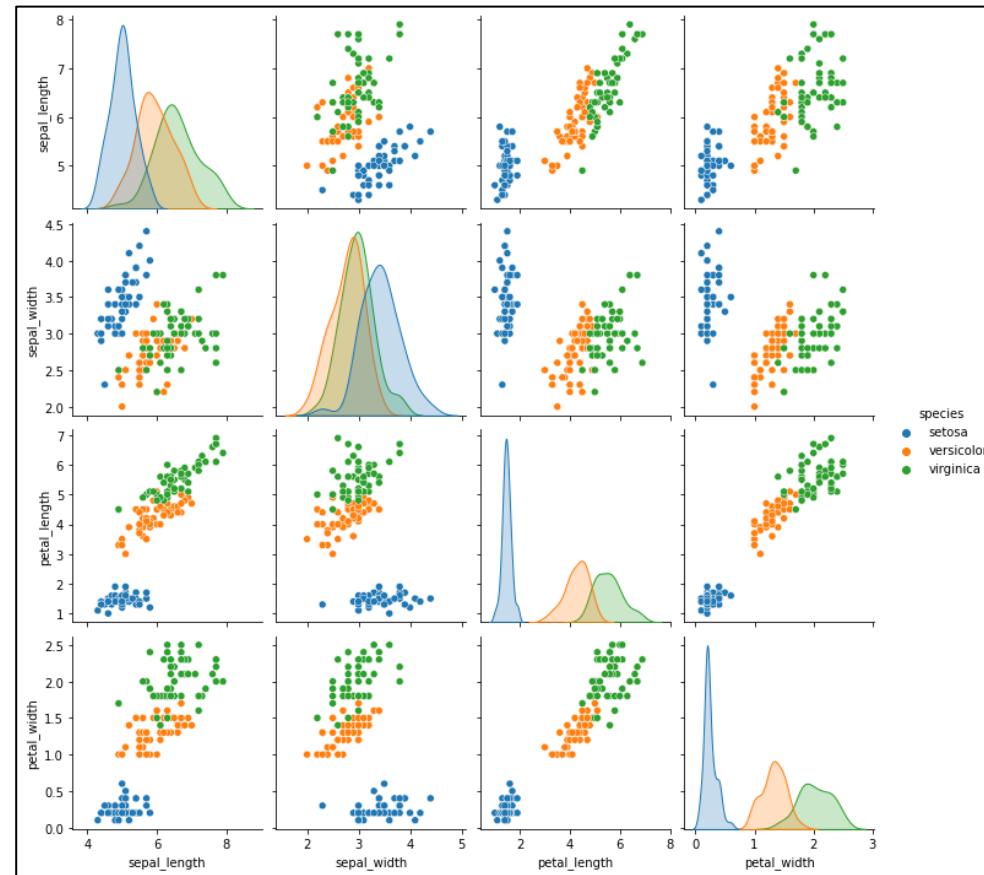
```
sns.heatmap(df.corr(),annot=True,fmt='.3f')
```



# Multivariate analysis

All continuous variables

Import seaborn as sns  
`sns.pairplot(df, hue='c1')`



# Thank you

---

FOR ANY QUERIES PING ME ON SKYPE GROUP

LAST TOPIC FOR DAY DONE, ONCE PRACTICAL COMPLETED YOU CAN  
LEAVE FOR THE DAY

