

pandas dataframe manipulation cheatsheet



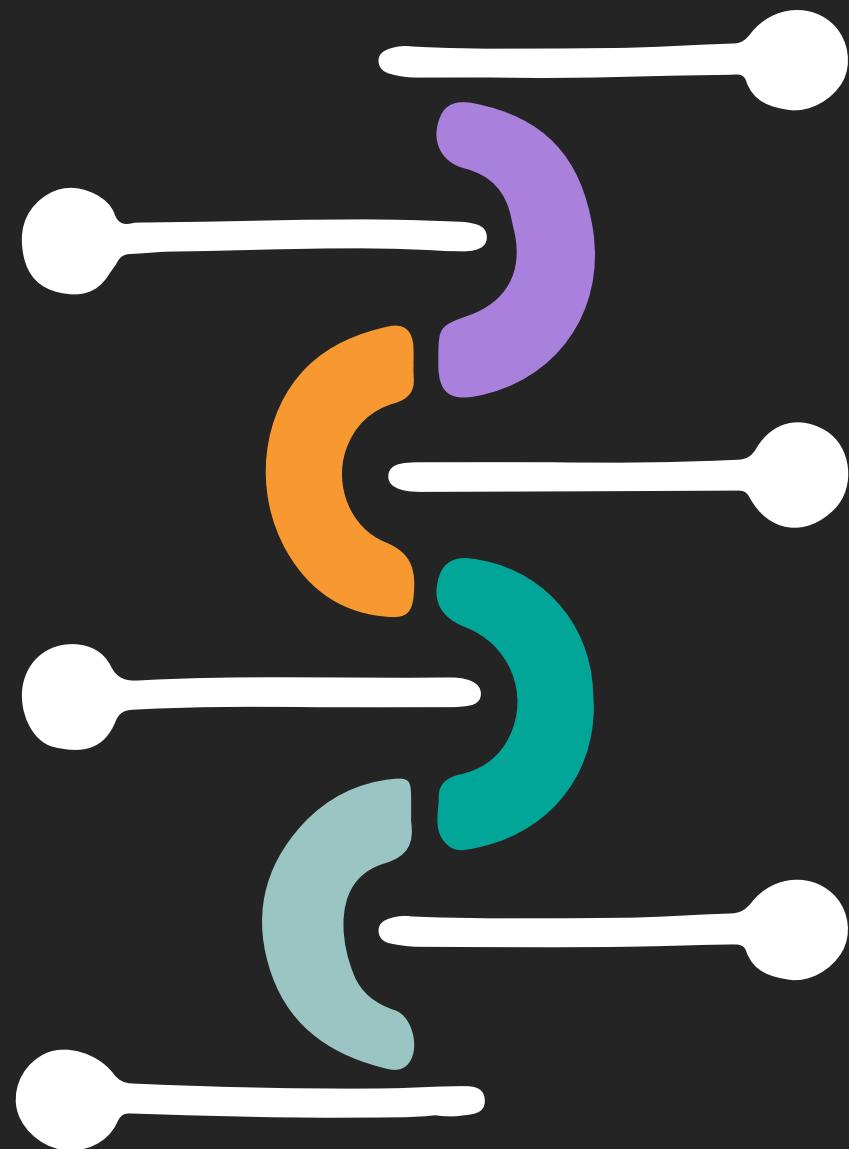
data exploring

tail()

helps you to show the last
'n' rows of the DataFrame

sample()

generates 'n'
sample of your
DataFrame



info()

gives you the column length,
types and count of the column
information of the Dataframe

head()

helps you to show the first
'n' rows of the DataFrame

shape()

shows the dimension of
the DataFrame

describe()

gives descriptive statistics
of your DataFrame: min,max,
iqr,mean.

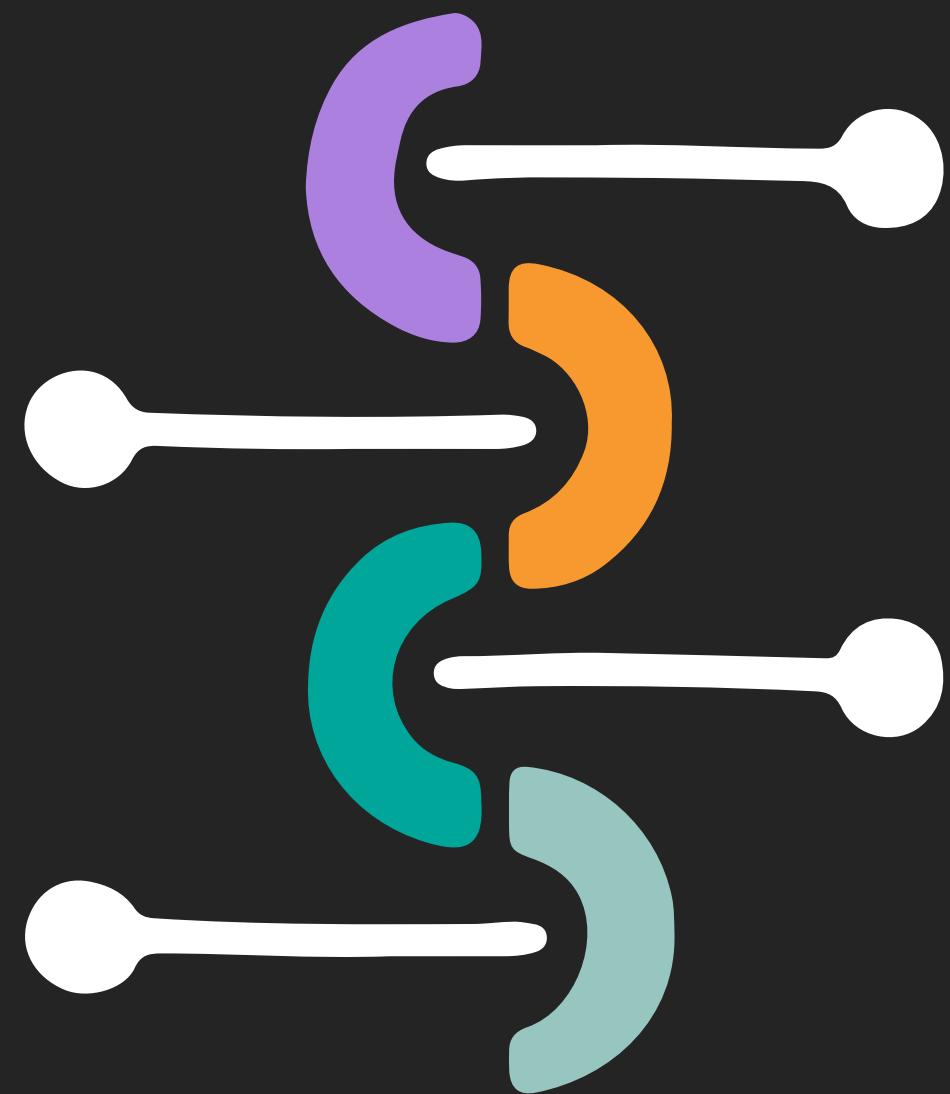
data retrieving

groupby()

it groups the DataFrame accordingly to the arguments

iloc()

it gets values of specific indexes



loc()

it helps you select the row and columns by names and labels

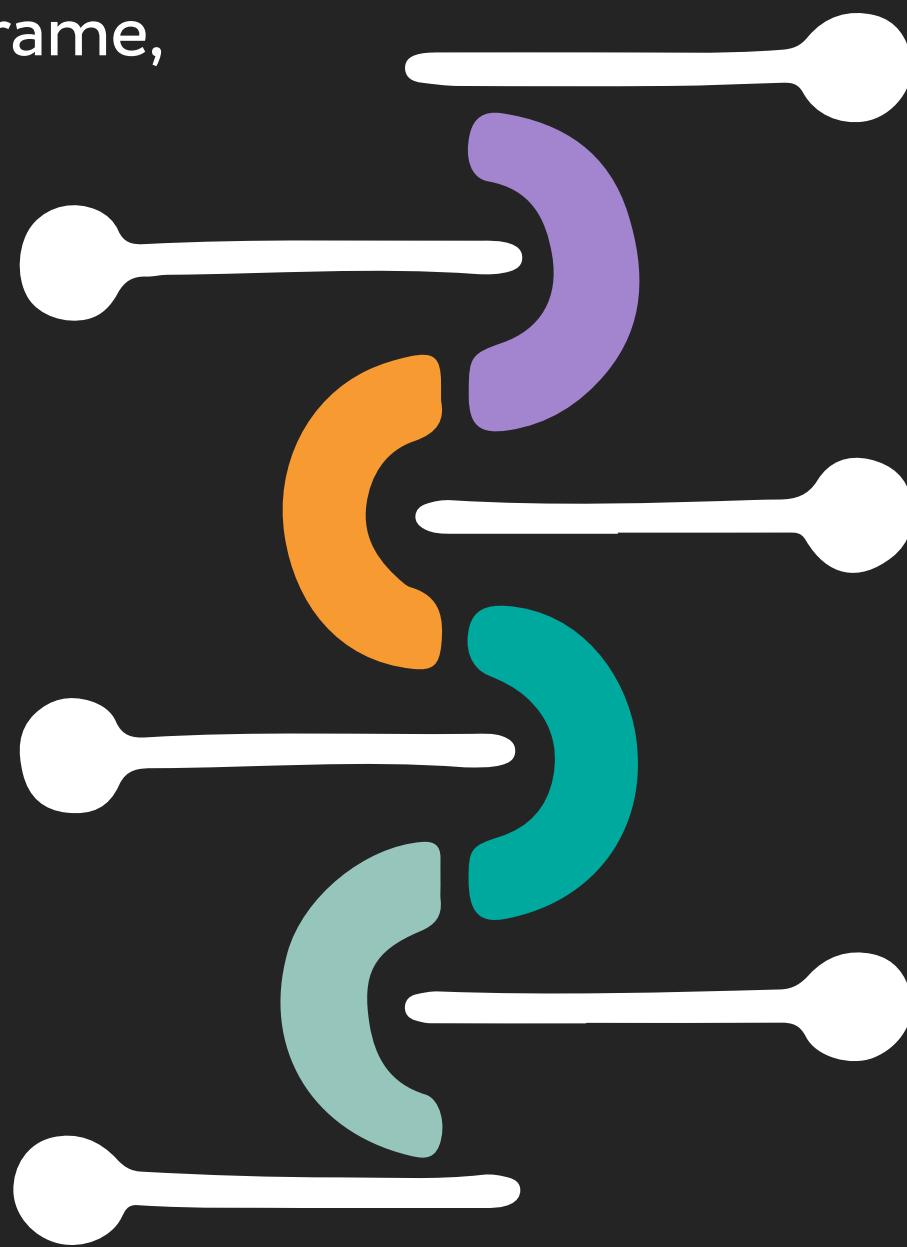
sort_values()

it sorts the DataFrame ascendingly or descendingly by a given column

data operations

agg()

passes one or multiple functions to column/rows and renames the index of the resulting DataFrame, which can reproduce aggregate results



drop()

removes rows or columns by labeling name or location (index)

transform()

allows you to broadcast function and functions to column/rows, can not produce aggregated results, works with function or function list written in a list, dictionary or string like

min()

calculates the min

max()

calculates the max

apply()
performs operations on columns, rows/DataFrames, only allowed to work with functions & can produce aggregate results

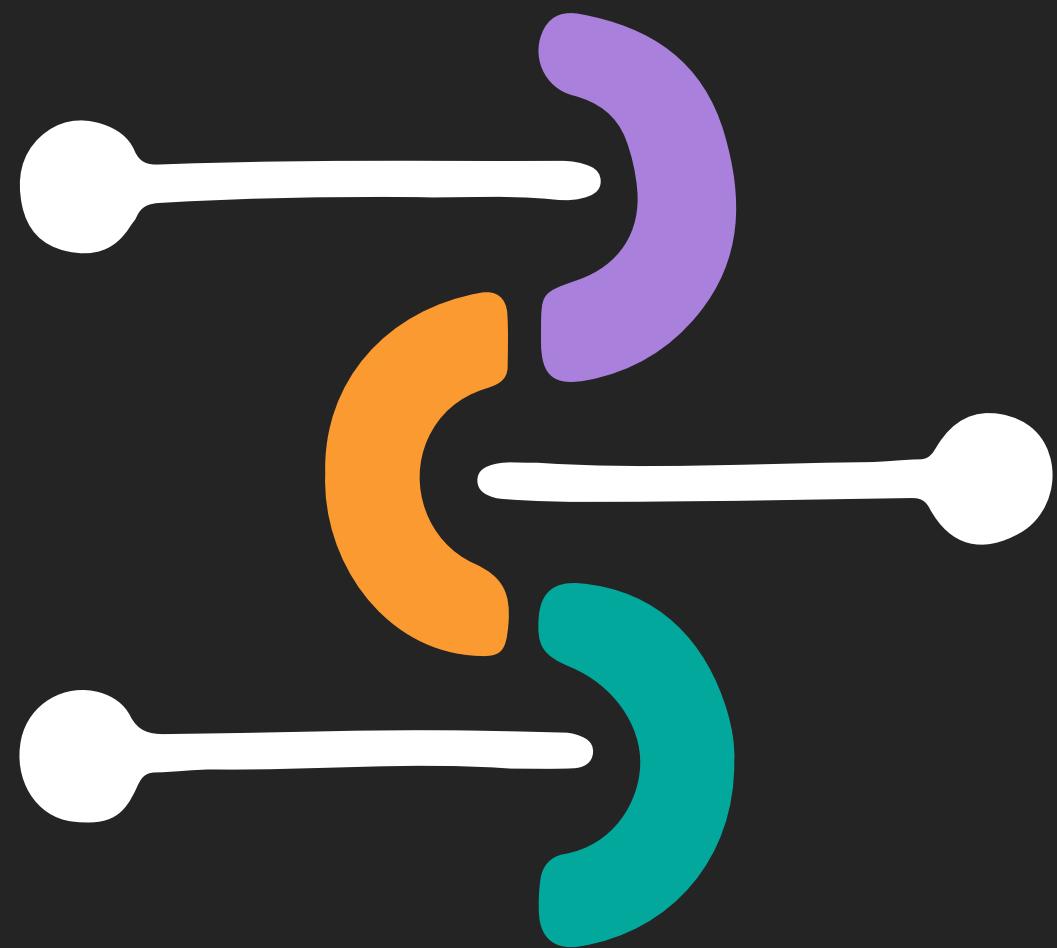
data operations

drop_duplicates()

output DataFrame without
duplicate rows

not_null()

detects non-missing values
and returns booleans
to show that



mean()

calculates the mean

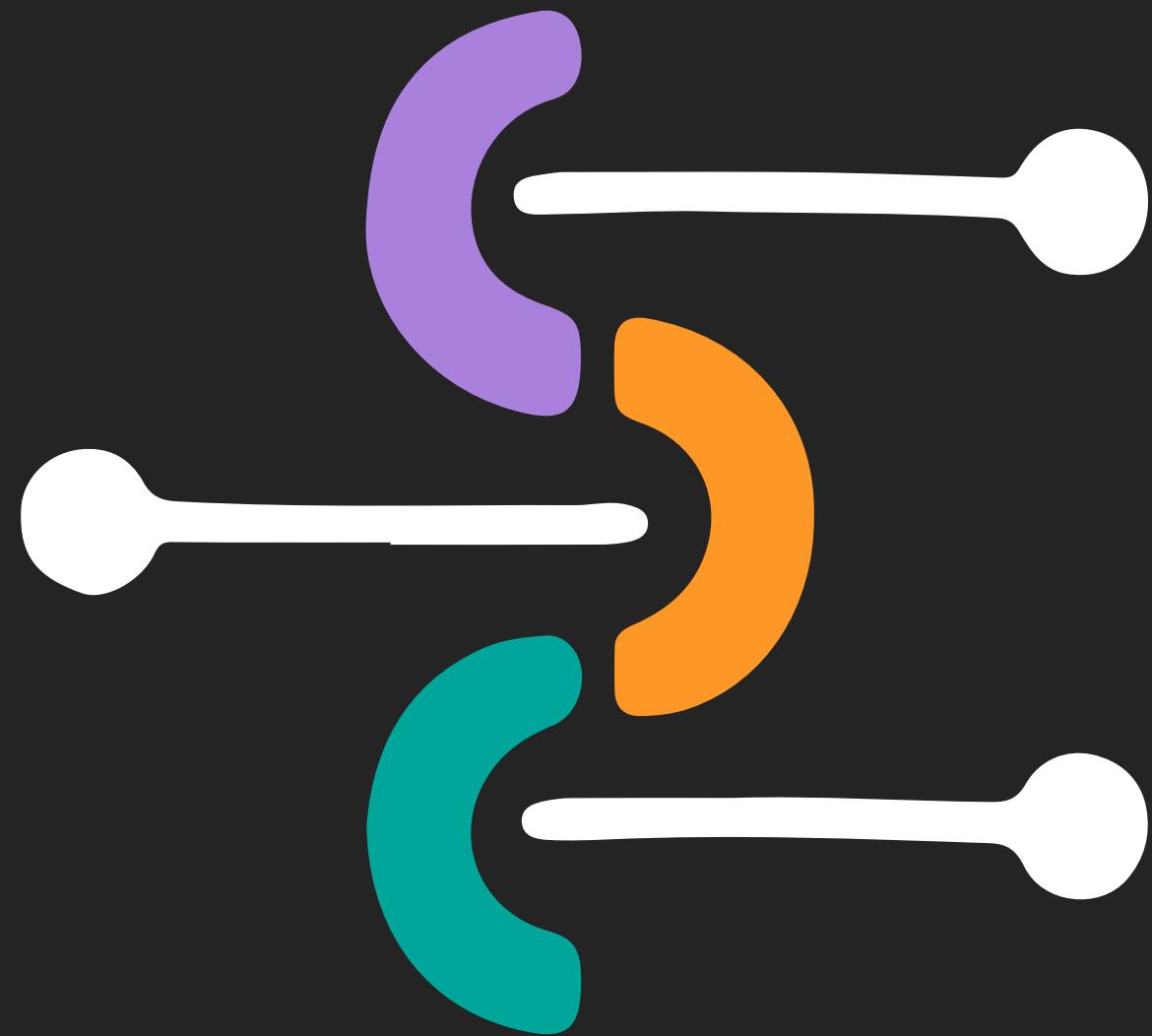
missing value & NA's

isna()

returns booleans(true, false)
which indicates the value na
or not

dropna()

drops missing values
from rows or columns



fill(na)
assigns specific values to NA's

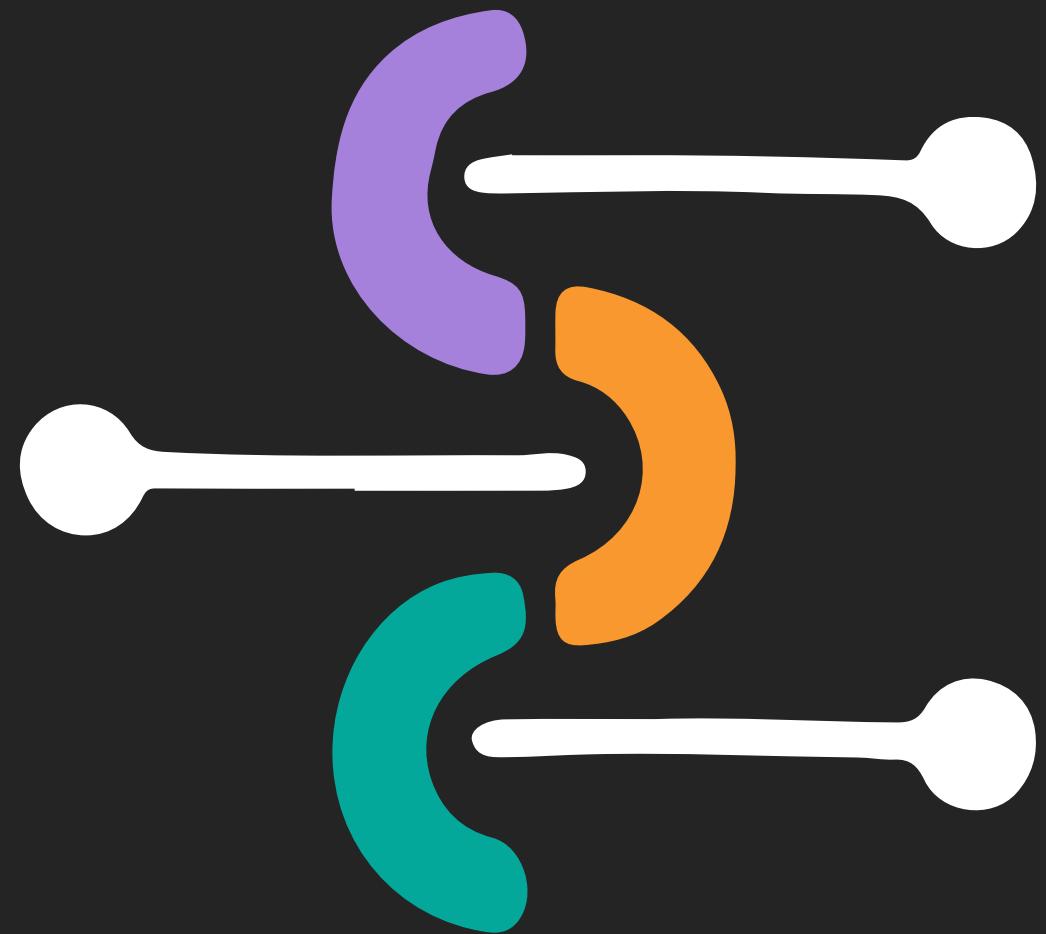
merging

merge()

combines two DataFrames
on columns or indices

concat()

bonds two DataFrame
across the rows or columns



join()

joins two DataFrames
on a key column or index

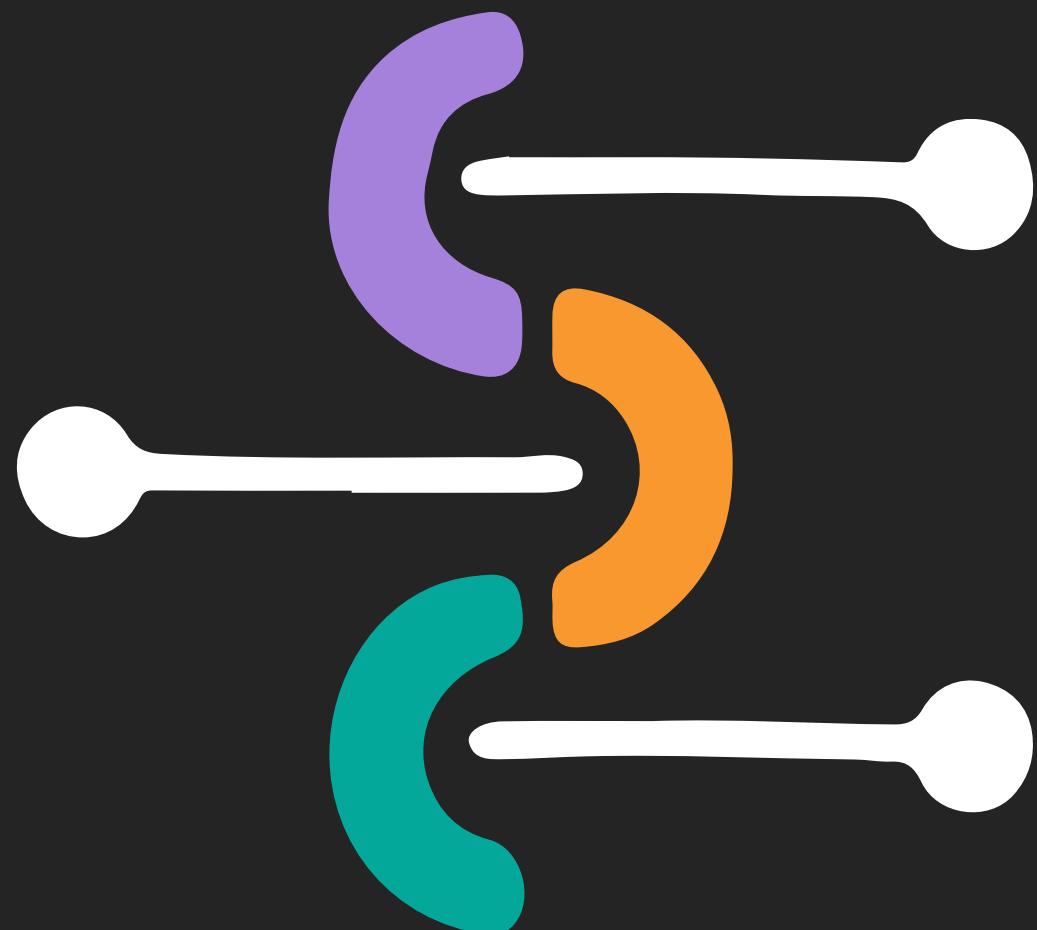
plotting

plot.bar()
to plot bar graph

plot.line()
to plot line graph

plot.scatter()
to draw scatter plot

plot.pie()
to plot pie chart



saving from and reading to DataFrame

read_sql()

To read from SQL
into a DataFrame

read_excel()

To read from excel files
into a DataFrame

read_csv()

To read from CSV files
into a DataFrame

read_json()

To read from json files
into a DataFrame

to_sql()

To save the DataFrame
into a SQL

to_excel()

To save the DataFrame
into a CSV file

to_csv()

To save the DataFrame
into a CSV file

read_json()

To save the DataFrame
into a json file

date time

dt.quarter()

It selects the “n” quarter of the DataFrame.
2 means the first 6 months

dt.year()

It returns the year of the date.

dt.month()

This function returns the number of month

to_datetime()

It changes the format of the DataFrame/series to a pandas date time object.