In-class exercise on Feb 14: Statistical analysis with iris data

import pandas as pd

import seaborn as sns

iris = sns.load\_dataset('iris')

1. Basic Exploration:

Display the first 5 rows of the dataset.

Display the summary statistics of the dataset using describe().

1. Mean, Median, and Mode:

Calculate the mean of the 'sepal\_length'.

Find the median of 'sepal\_width'.

Determine the mode of 'species'.

1. Variance and Standard Deviation:

Compute the variance of 'petal\_length'.

Calculate the standard deviation of 'petal\_width'.

1. Skewness and Kurtosis:

Find the skewness of the entire dataset.

Determine the kurtosis of the 'sepal\_length'.

1. Quantiles:

Calculate the 25th, 50th, and 75th percentiles of 'petal\_length'.