

This code will:

Compute the correlation coefficients between all variables in the dataframe `df3`.

Create a heatmap visualizing these correlation coefficients.

Print a description of the correlation matrix statistics.

In the heatmap:

The color intensity represents the strength and direction of the correlation. Positive correlations are indicated by warmer colors (closer to red), while negative correlations are indicated by cooler colors (closer to blue).

Values closer to 1 or -1 indicate a stronger correlation, while values closer to 0 indicate weaker correlation or no correlation.

The description of the correlation matrix statistics provides summary statistics such as count, mean, standard deviation, minimum, quartiles, and maximum for the correlation coefficients.

You can interpret the correlation coefficients to understand the relationships between variables. For example:

Variables with high positive correlation coefficients tend to increase or decrease together.

Variables with high negative correlation coefficients tend to change in opposite directions.

Variables with correlation coefficients close to 0 indicate little to no linear relationship.