

25%	40.500000	39.500000	22.000000	15.500000
50%	47.000000	47.000000	44.000000	22.000000
75%	67.500000	63.500000	62.500000	36.500000
max	74.000000	73.000000	66.000000	52.000000

Correlation

Correlation shows how much relationship exists between two variables. Parametric machine learning methods such as logistic and linear regression can take a performance hit when variables are highly correlated. The correlation values range from -1 to 1 , with 0 indicating no correlation at all. -1 signifies that the variables are strongly negatively correlated, while 1 shows that the variables are strongly positively correlated. In practice, it is safe to eliminate variables that have a correlation value greater than -0.7 or 0.7 . A common correlation estimate in use is the Pearson's correlation coefficient.

```
my_DF.corr(method='pearson')
```

'Output':

	First	Second	Third	Fourth
First	1.000000	0.587645	-0.014100	-0.317333
Second	0.587645	1.000000	-0.768495	-0.345265
Third	-0.014100	-0.768495	1.000000	0.334169
Fourth	-0.317333	-0.345265	0.334169	1.000000

Skewness

Another important statistical metric is the skewness of the dataset. Skewness is when a bell-shaped or normal distribution is shifted toward the right or the left. Pandas offers a convenient function called **skew()** to check the skewness of each variable. Values close to 0 are more normally distributed with less skew.

```
my_DF.skew()
```

'Output':

First	-0.167782
Second	-0.566914
Third	-0.084490
Fourth	0.691332

dtype: float64