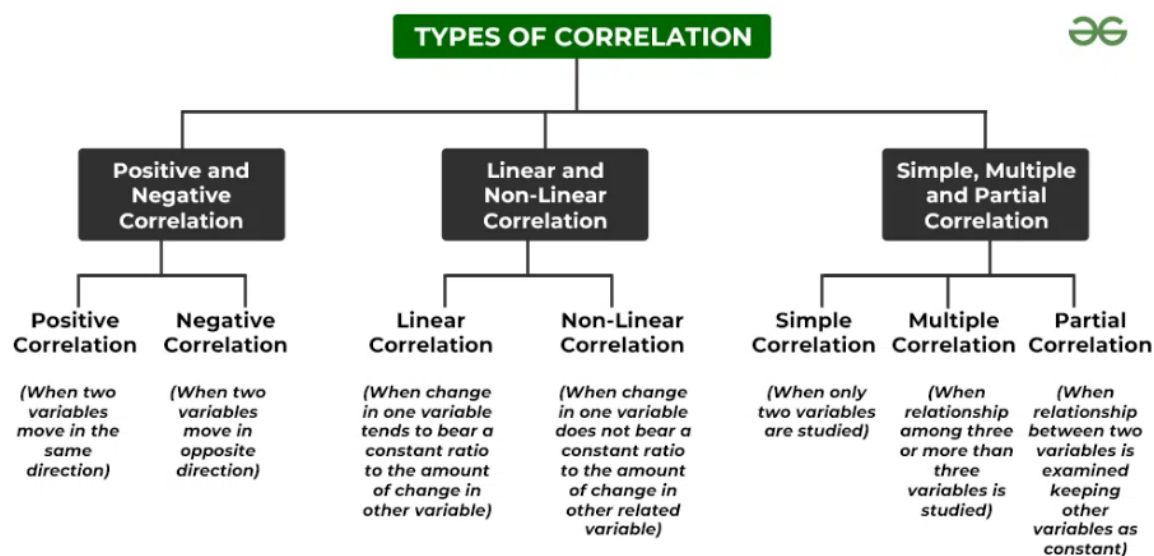01-12-2025

Types of Correlation

Correlation can be classified based on various categories:

Based on the direction of change in the value of two variables, correlation can be classified as:

1. Positive Correlation:

When two variables move in the same direction; i.e., when one increases the other also increases and vice-versa, then such a relation is called a **Positive Correlation.**

For example, Relationship between the price and supply, income and expenditure, height and weight, etc.

Simultaneous increase in the value of both the Variables		Simultaneous decrease in the value of both the Variables	
X	Y	X	Y
20	120	60	500
30	170	50	400
40	220	40	300
50	270	30	200
60	320	20	100

2. Negative Correlation:

When two variables move in opposite directions; i.e., when one increases the other decreases, and vice-versa, then such a relation is called a **Negative Correlation.**

For example, the relationship between the price and demand, temperature and sale of woollen garments, etc.

Rise in the value of one variable (X) and fall in other (Y)		Rise in the value of one variable (Y) and fall in other (X)	
X	Y	X	Y
10	100	250	100
20	90	200	k200
30	80	150	300
40	70	100	400
50	60	50	500