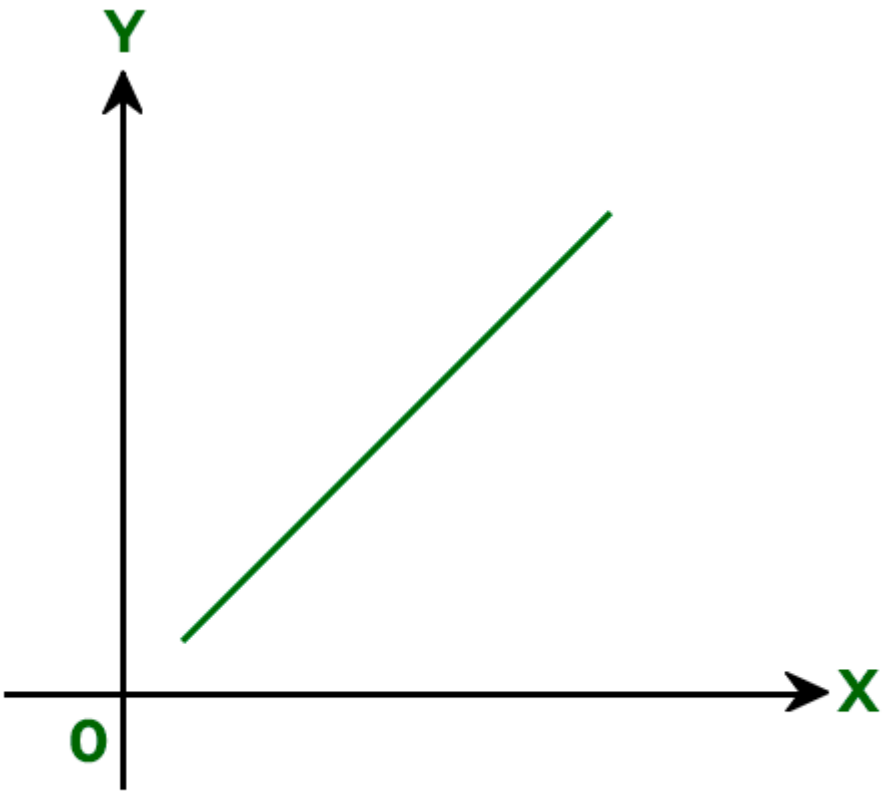
02-12-2025

Based on the ratio of variations between the variables, correlation can be classified as:

1. Linear Correlation:

When there is a constant change in the amount of one variable due to a change in another variable, it is known as **Linear Correlation.** This term is used when two variables change in the same ratio. If two variables that change in a fixed proportion are displayed on graph paper, a straight- line will be used to represent the relationship between them. As a result, it suggests a linear relationship.

X	10	15	20	25	30
Y	10	20	30	40	50



Linear Correlation

In the above graph, for every change in the variable X by 5 units there is a change of 10 units in variable Y. The ratio of change of variables X and Y in the above schedule is 1:2 and it remains the same, thus there is a linear relationship between the variables.