Example numerical on KNN classification

Name	Acid durability	Strength	Class
Type-1	7	7	Bad
Type-2	7	4	Good Bad
Type-3	3	4	Good
Type-4	1	4	Good

Test data → Acid durability = 3
Strength = 7
Class = ?

Name	Acid durability	Strength	class	Distance
Type-1	7	7	Bad	$\sqrt{(7-3)^2 + (7-7)^2} = 4$
Type-2	7	4	Bad	$\sqrt{(7-3)^2 + (7-4)^2} = 5$
Type-3	3	4	Good	$\sqrt{(3-3)^2 + (7-4)^2} = 3$
Type-4	1	4	Good	$\sqrt{(3-1)^2 + (7-4)^2} = 3.6$

Write the Rank for the records based on the distance between them.

Type	Acid durability	Strength	class	distance	Rank
Type-1	7	7	Bad	4	3
-2	7	4	Bad	5	4
-3	3	4	Good	3	1
-4	1	4	Good	3.6	2

For.

K = 1

Test data belongs to class "Good".

K = 2

Test data belongs to class "Good".