Here in this face , the given test image will be converted into pixels which are stores at the X coordinate. We have to find the Y coordinate of the test image mathematically which is nothing but we are trying to find the details of the test image in a generalized form.

Xt=qi1, qi2, qi3 - - - qin

Yt=?

So here we need to find the nearest neighbour so that we will assume the Yi coordinate of the nearest neighbour will become the Yt coordinate of the test image mathematically. In genaralised way, the details of the nearest neighbour image will become the details of the test image.

Yt = Yi

To find the nearest neighbour we use Euclidean distance formula.

Chart, scatter chart

Description automatically generated