

# Scratch Implementation (Assignment)

## Implement KNN Regressor from Scratch

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Implement a **K-Nearest Neighbours (KNN) Regressor from scratch** (without using scikit-learn).

Given a dataset of points with input features and continuous target values, your task is to:

1. Compute distances between data points
2. Find the  $k$  nearest neighbours (use Euclidean distance)
3. Predict the output as the **average of the neighbours' target values**

Use sample **Training Data**

$X_{train} = [[1], [2], [3], [4], [5]]$

$y_{train} = [2, 4, 6, 8, 10]$

**Testing Data**

$X_{test} = [[1.5], [3.5], [6]]$