kNN Classification

Objective: Apply kNN classification to a real dataset and analyze its performance.

1. **Dataset:**
    - Use the Iris dataset from **sklearn.datasets**. Split the data into training and testing sets (80% training, 20% testing).
2. **Implementation:**
    - Implement the kNN classification algorithm using the provided functions.
    - Modify the **classification** function to include a weighted voting mechanism where closer neighbors have more influence. The weight can be inversely proportional to the distance.
3. **Evaluation:**
    - Test the classification performance with different values of k (e.g., 1, 3, 5, 7) and compare the results.
    - Calculate accuracy, precision, and recall for the model on the testing set.