README:

Code Instructions

Files:

decision_tree.py: The code to run decision tree classifier.

k_nearest_neighbor.py: The code to run k_nearest_neighbor classifier.

random_forest.py: The code to run random_forest classifier.

Dataset:

Fashion-MNIST: https://github.com/zalandoresearch/fashion-mnist

Running steps:

1. Import the Fashion-MNIST dataset include 4 files:

- *train-images-idx3-ubyte.gz*

- *train-labels-idx1-ubyte.gz*

- *t10k-images-idx3-ubyte.gz*

- *t10k-labels-idx1-ubyte.gz*

2. Running k_nearest_neighbor.py file which include using the Cross-Validation choose the greater parameter and KNN testing.

3. Running decision_tree.py as step2

4. Running random_forest.py as step2

When running the **decision_tree.py** file, please set the working directory in the "code" folder.

When running the **k_nearest_neighbor.py** file, please set the working directory in the "code" folder.

When running the **random_forest.py** file, please set the working directory in the "code" folder.