

Overview:
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Implementation of decision trees and decision forests. Program to learn decision trees from training data and apply decision trees and decision forests to classify test objects.

Language:
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MATLAB

Commands to run the program:
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`dtree <training_file> <test_file> <option> <pruning_thr>`

Arguments:

- The first argument, <training_file>, is the path name of the training file, where the training data is stored.

The path name can specify any file stored on the local computer.

- The second argument, <test_file>, is the path name of the test file, where the test data is stored.

The path name can specify any file stored on the local computer.

- The third argument, <option>, can have four possible values: optimized, randomized, forest3, or forest15.

It specifies how to train (learn) the decision tree, and will be discussed later.

- The fourth argument, <pruning_thr>, is a number greater than or equal to 0, that specifies the pruning threshold.

```
dtree('pendigits_training.txt', 'pendigits_test.txt', 'optimized', 50);
```

```
dtree('pendigits_training.txt', 'pendigits_test.txt', 'randomized', 50);
```

```
dtree('pendigits_training.txt', 'pendigits_test.txt', 'forest3', 50);
```