

Classifiers: J48 (decision tree)

```
import weka.classifiers.trees.*;

//1. build decision tree classifier
String[] options = new String[1];
options[0] = "-U"; // unpruned tree
J48 tree = new J48(); // new instance of tree
tree.setOptions(options); // set the options
tree.buildClassifier(data); // build classifier
```

Classify unlabeled records

```
//2. *****
```

```
//classify unlabeled data from a file provided as a file name in args[1]
```

```
// load unlabeled data
```

```
Instances unlabeled = new Instances( new BufferedReader( new  
FileReader(args[1])));
```

```
// set class attribute
```

```
unlabeled.setClassIndex(unlabeled.numAttributes() - 1);
```

```
// create copy
```

```
Instances labeled = new Instances(unlabeled);
```

```
// label instances
```

```
for (int i = 0; i < unlabeled.numInstances(); i++)
```

```
{
```

```
    double clsLabel = tree.classifyInstance(unlabeled.instance(i));
```

```
    labeled.instance(i).setClassValue(clsLabel);
```

```
}
```