

```
1 import java.io.File;
2 import java.io.IOException;
3
4 public class Main {
5
6     public static void main(String[] args) {
7         NeuralNet xor = new NeuralNet();
8         xor.initializeTrainSet();
9
10        //train the network for 100 trials
11        int epoch = 0;
12        for(int i = 0; i < 100; i++) {
13            xor.initializeWeights();
14            epoch += xor.train();
15        }
16        epoch /= 100;
17        System.out.println("avg epoch " + epoch);
18        xor.saveError();
19
20        //save and load weights
21        xor.save(new File("weights.txt"));
22        try {
23            xor.load("weights.txt");
24        } catch (IOException e) {
25            e.printStackTrace();
26        }
27    }
28 }
29
30
```