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PART 3:

1. Report on the accuracy of your perceptron. For example, did it find a correct set of weights? Did its performance change much between different runs?

```
----------------------------------------------------------------------
The final set of weights the perceptron algorthim learnd:
 Final Weight:
[6.0, 6.0, -111.0, -105.0, -105.0, 0.0, -111.0, 0.0, 117.0, 111.0, 6.0, 111.0, 6.0, 0.0, -111.0, 0.0,
117.0, -105.0, 0.0, 6.0, 111.0, 6.0, 111.0, 111.0, 0.0, 111.0, 117.0, 6.0, -111.0, 0.0, -111.0, 6.0,
-111.0, -111.0, 111.0, 111.0, -105.0, -105.0, 6.0, -105.0, 6.0, 0.0, 117.0, -111.0, 117.0, -105.0,
0.0, -111.0, 6.0, 0.0, 117.0]
----------------------------------------------------------------------
----------------------------------------------------------------------
The limit times: 111
The algorthim iterate 111 out of 111 times in total
----------------------------------------------------------------------
The total size of the image is: 100
It finally got 98 out of 100 correct prediction.
The accuracy is 98/100, which is:

        98.00%
----------------------------------------------------------------------
```

The screenshot above is the result, due to the feature is random generated each time, so this result is unique.

As we can see that, my perceptron got 98% accuracy. I think it find the correct set of weight, because the initialization of the weight values are all set to 0, and most of the final weights values are changed.

2. Explain why evaluating the perceptron's performance on the training data is not a good measure of its effectiveness. For an A+, you should create additional data to get a better measure (e.g. using MakeImage.java). If you do, report on the perceptron's performance on this additional data.

Run on the training data will change the associated feature weight in order to get better accuracy results on the training set, therefore the weights are only for the training set, not mention that the features are random.