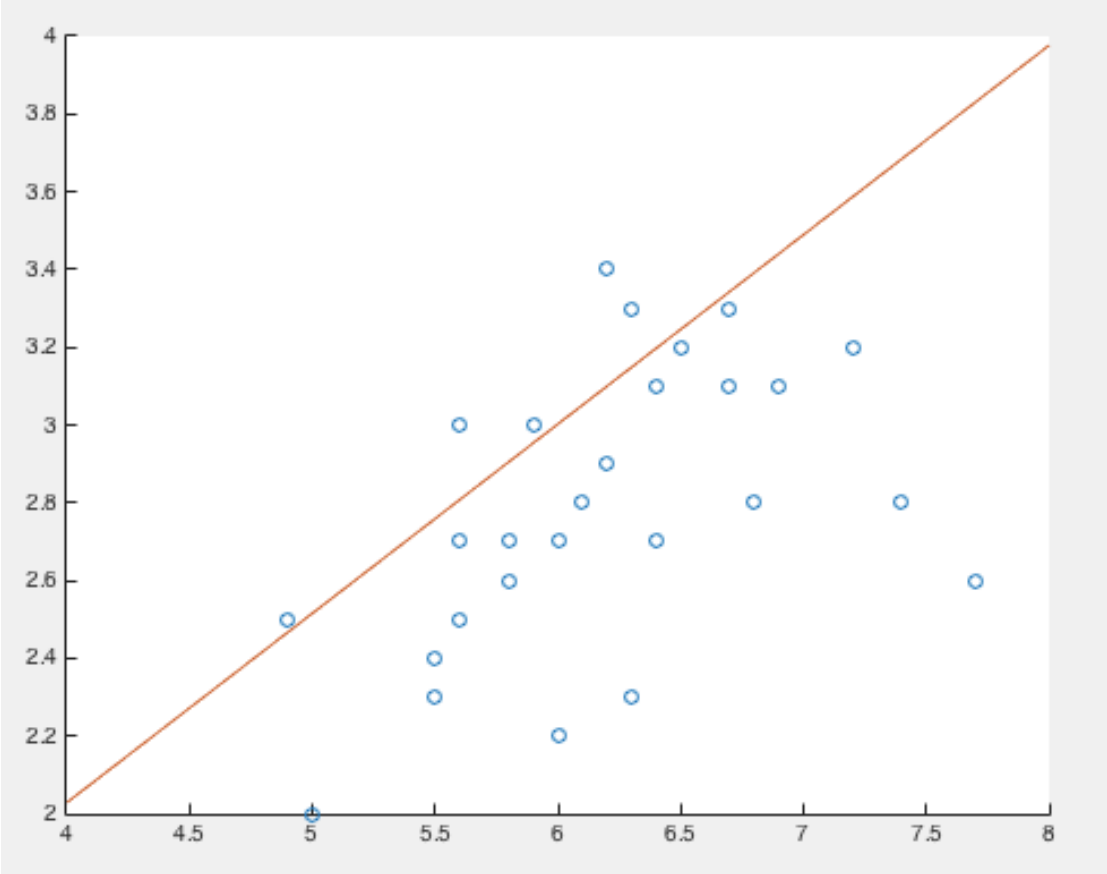
3.2.3 Sense Making

1.



2.

result:

```
[nb.m] Your nb solution gives precision: 0.96667
[lp.m] Your lp solution gives precision: 0.56667
```

As the results shown above, the precision of Naïve Bayes classifier is very accurate and very closed to 100%. However, the precision of linear perceptron classifier is not good at all. I think it makes senses because with Naïve Bayes classifier, we use sufficient points to estimate mean and covariance so that we can have accurate Gaussian distribution, which results in accurate classifier. But linear perceptron doesn't work well because we use online perceptron and only run each point once. The better way to improve precision is to run the data several times to find out the best orientation of the decision boundary.