

1.

```
C:\Users\xxx\Desktop\HW_4_Porgramming>python Linear_Classifiers.py --data starplus --algorithm logistic
number of training data instances: (258391, 40)
number of test data instances: (258391, 14)
number of training data labels: (40, 1)
number of test data labels: (14, 1)
Accuracy: training set: 1.0
Accuracy: test set: 0.7142857142857143
```

2.

```
C:\Users\xxx\Desktop\HW_4_Porgramming>python Linear_Classifiers.py --data simple --algorithm perceptron
number of training data instances: (3, 8)
number of test data instances: (3, 2)
number of training data labels: (8, 1)
number of test data labels: (2, 1)
Accuracy: training set: 1.0
Accuracy: test set: 1.0
```

3.

```
C:\Users\xxx\Desktop\HW_4_Porgramming>python Linear_Classifiers.py --data starplus --algorithm perceptron
number of training data instances: (258391, 40)
number of test data instances: (258391, 14)
number of training data labels: (40, 1)
number of test data labels: (14, 1)
Accuracy: training set: 1.0
Accuracy: test set: 0.7857142857142857
```

4.

```
C:\Users\xxx\Desktop\HW_4_Porgramming>python Linear_Classifiers.py --data simple --algorithm logistic
number of training data instances: (3, 8)
number of test data instances: (3, 2)
number of training data labels: (8, 1)
number of test data labels: (2, 1)
Accuracy: training set: 1.0
Accuracy: test set: 1.0
```

5.none