```
In [5]: runfile('D:/TAU/Courses/Intro to ML/Exercise week 4/runnable.py', wdir='D:/TAU/
Courses/Intro to ML/Exercise week 4')
Naive Bayes Accuracy:  11.06
Bayes Accuracy:  24.7
Accuracy for size 1 * 1 is: 22.79
Accuracy for size 2 * 2 is: 28.849999999999998
Accuracy for size 4 * 4 is: 36.14
```

Here we can see that the Naive Bayes Accuracy is 11.06 and Bayesian Classifier the accuracy is 24.7. The Bayesian classifier is better than Naive Bayes Classifier. The reason behind this is not taking the Naive assumption of every color channel is independent for each other. Bayesian Classifier considers the relations between each color channel as a covariance matrix, significantly improving accuracy.