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Write-up Assignment4 part I

Youtube Link: <https://www.youtube.com/watch?v=gNrWrPUNS0A&feature=youtu.be>

Provide the overall classification accuracy obtained on the full test data.

| | Actual | Predicted |
|----|--------|-----------|
| 0 | 1 | 1 |
| 1 | 0 | 0 |
| 2 | 0 | 0 |
| 3 | 1 | 1 |
| 4 | 1 | 1 |
| 5 | 0 | 0 |
| 6 | 1 | 1 |
| 7 | 1 | 1 |
| 8 | 0 | 0 |
| 9 | 1 | 1 |
| 10 | 0 | 0 |
| 11 | 1 | 1 |
| 12 | 0 | 0 |
| 13 | 0 | 0 |
| 14 | 1 | 1 |
| 15 | 1 | 1 |
| 16 | 0 | 0 |
| 17 | 1 | 1 |
| 18 | 0 | 0 |
| 19 | 0 | 0 |

Provide output showing actual and predicted class labels for the first 20 document instances in the test data.

The overall classification accuracy = 99.5

Provide output from your trained model showing the complete class probabilities for the following terms: "program", "includ", "match", "game", "plai", "window", "file", "subject", "write".

```
word in terms: program, P(Microsoft): 0.005902, P(Hockey): 0.000109
word in terms: includ, P(Microsoft): 0.005266, P(Hockey): 0.000692
word in terms: match, P(Microsoft): 0.000236, P(Hockey): 0.000382
word in terms: game, P(Microsoft): 0.000218, P(Hockey): 0.012202
word in terms: plai, P(Microsoft): 0.000127, P(Hockey): 0.007212
word in terms: window, P(Microsoft): 0.013057, P(Hockey): 0.000055
word in terms: file, P(Microsoft): 0.006701, P(Hockey): 0.000055
word in terms: subject, P(Microsoft): 0.009843, P(Hockey): 0.007631
word in terms: write, P(Microsoft): 0.003777, P(Hockey): 0.005045
```