1) Missing Code

```
positive_class = x[np.where(y.reshape(1, -1).reshape(-1) == 0)]
negative_class = x[np.where(y.reshape(1, -1).reshape(-1) == 1)]

positve_sum = [np.sum(positive_class, axis=0), np.sum(np.sum(positive_class, axis=0))]
negative_sum = [np.sum(negative_class, axis=0), np.sum(np.sum(negative_class, axis=0))]

likelihood = np.array([[(positve_sum[0][i] + 1) / (positve_sum[1] + n_words), (negative_sum[0][i]
+ 1) / (negative_sum[1] + n_words)] for i in range(n_words)])

prior = [positive_class.shape[0] / n_docs, negative_class.shape[0] / n_docs]
```

2) Modify Result

Accuracy on training set: 0.980000, on test set: 0.811000