3. SVM Classifier

1. Repeat the steps in part II, but this time with a SVM classifier using default kernel. Report the accuracy on 10 different training samples and also the average accuracy (similar to part II)

```
Experiment:  1 Accuracy 77.92208 %
Experiment:  2 Accuracy 77.92208 %
Experiment:  3 Accuracy 76.62338 %
Experiment:  4 Accuracy 77.92208 %
Experiment:  5 Accuracy 80.51948 %
Experiment:  6 Accuracy 72.72727 %
Experiment:  7 Accuracy 71.42857 %
Experiment:  8 Accuracy 75.32468 %
Experiment:  9 Accuracy 77.92208 %
Experiment:  10 Accuracy 77.92208 %


Overall AVerage Accuracy is: 76.62338 for kernal = default
```

2. Change the value of the kernel from the default to the following values:

- **linear**
- **polynomial**
- **radial basis**
- **sigmoid**

Carry out 10 experiments using different samples and each of the kernels above. Report only the average accuracy in each case.

```
Overall AVerage Accuracy is: 77.07792 for kernal = linear
Overall AVerage Accuracy is: 77.18615 for kernal = polynomial
Overall AVerage Accuracy is: 76.49351 for kernal = radial
Overall AVerage Accuracy is: 75.2987 for kernal = sigmoid
```