Assignment 5 ML

1. Number of Samples in Training Data Set - 6000
2. Total Time of the Training Data Set - 50 minutes
3. Size of the window in time - 0.5 second
4. Features Selected - accel_x, accel_y, accel_z were used directly as very high accuracy was observed on test data even without significant feature engineering.
5. Parameters of the learned model -
   Svm_type - c_svc, kernel_type - rbf, gamma 0.333333, rho -6.70223
6. Number of Samples in Evaluation Data Set - 2796
7. Total Time of the Evaluation Data Set - 20 minutes
8. Confusion matrix -

Actual Predicted	Walking	Stationary
Walking	1605	7
Stationary	30	1154

9. Accuracy - 98.67 %
10. For Walking -
    Precision- 99.56 %
    Recall - 98.16 %
    F1 Score - 98.86 %

10. For Stationary -
    Precision- 97.46 %
    Recall - 99.39 %
    F1 Score - 98.42 %