ASSIGNMENT 4 REPORT

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# Question 1:

For the VidTIMID dataset,   
Training Samples – 3500; Testing Samples – 1000

|  |  |
| --- | --- |
|  | Accuracy |
| Question 1 (VidTIMIT Dataset) | 98.80 |

We used *fitcsvm* and *predict* built-in functions to solve the problem. For the *fitcsvm* function, we gave, Classnames as True & False, and passed the Polynomial kernel function of degree 2. We assumed that the output class label, in one row had only entry with value 1 and the rest 0.

# Question 2(a)

For the Multi Label scene data,  
Training Samples – 1500; Testing Samples – 907

|  |  |
| --- | --- |
|  | Accuracy |
| Question 2(A) using Polynomial Kernel | 64.35 |

We used *fitcsvm* and *predict* built-in functions to solve the problem. For the *fitcsvm* function, we gave, Classnames as True & False, and passed the Polynomial kernel function of degree 2.

# Question 2(B)

For the Multi Label scene data,  
Training Samples – 1500; Testing Samples – 907

|  |  |
| --- | --- |
|  | Accuracy |
| Question 2(A) using Gaussian Kernel | 64.31 |

We used *fitcsvm* and *predict* built-in functions to solve the problem. For the *fitcsvm* function, we gave, Classnames as True & False, and passed the Gaussian kernel function with Kernel scale set to ‘Auto’.