# Report Assignment-4

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#### Part A:

By varying the value of Alpha, the accuracy was found to be highest when Alpha=0, at 0.7307692307. As alpha increases, the accuracy decreases.

The accuracies as we increase Alpha:

| Alpha | Accuracy |
|-------|----------|
| 0     | 0.730    |
| 0.1   | 0.677    |
| 0.2   | 0.639    |
| 0.3   | 0.639    |
|       |          |
| 1     | 0.639    |

## Part B:

By varying the value of Alpha, the accuracy was found to be highest when Alpha=0, at 0.7307692307. As alpha increases, the accuracy decreases.

The accuracies as we increase Alpha:

| Alpha | Accuracy |
|-------|----------|
| 0     | 0.730    |
| 0.1   | 0.716    |
| 0.2   | 0.711    |
| 0.3   | 0.706    |
| ••••  |          |
| 1     | 0.701    |

As can be seen, the accuracies decrease at a much slower rate than in Part A.

## Part C:

By varying the value of Alpha, the accuracy was found to be highest when Alpha=0, at 0.7307692307. As alpha increases, the accuracy decreases.

The accuracies as we increase Alpha:

| Alpha | Accuracy |
|-------|----------|
| 0     | 0.730    |
| 0.1   | 0.692    |
| 0.2   | 0.658    |
| 0.3   | 0.639    |
|       |          |
| 1     | 0.639    |

The drop in accuracy here is similar to that exhibited in Part A.

## Part D:

The accuracy is found to be 0.7307692307.