Report

Program was tested for **3300** test images with **60000** training images. It took 3 hours to give results.

Percentage of Accuracy by using **Eucidean distance** =

( Number of correct predictions/Total Test Images)\*100

%=(3157/3300)\*100 = **95.67% accuracy**

Percentage of Accuracy by using **Cosine Similarity**=

( Number of correct predictions/Total Test Images)\*100

%=(3180/3300)\*100 = **96.36% accuracy**

**For first 10 Test Images**

By Euclidean Distance predicted label = 7

By Similarity Cosine predicted label = 7

actual label = 7

By Euclidean Distance predicted label = 2

By Similarity Cosine predicted label = 2

actual label = 2

By Euclidean Distance predicted label = 1

By Similarity Cosine predicted label = 1

actual label = 1

By Euclidean Distance predicted label = 0

By Similarity Cosine predicted label = 0

actual label = 0

By Euclidean Distance predicted label = 4

By Similarity Cosine predicted label = 4

actual label = 4

By Euclidean Distance predicted label = 1

By Similarity Cosine predicted label = 1

actual label = 1

By Euclidean Distance predicted label = 4

By Similarity Cosine predicted label = 4

actual label = 4

By Euclidean Distance predicted label = 9

By Similarity Cosine predicted label = 9

actual label = 9

By Euclidean Distance predicted label = 5

By Similarity Cosine predicted label = 5

actual label = 5

By Euclidean Distance predicted label = 9

By Similarity Cosine predicted label = 9

actual label = 9