Assignment 7

compile command: g++ filename.cpp -pthread

execution command: ./a.out datafile

Enter the no of iterations and pool size in the comand prompt

Maximum pool size allowed=10

Weight initialization method= random

Bias=0

initial learning rate=0.01

Accuracy = #correct predictions/#total predictions

Task-1

Accuracy after iteration 1: 55.57% Accuracy after iteration 2: 60.80% Accuracy after iteration 3: 60.81%

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Accuracy after iteration 40: 68.75%

<u>Time Analysis:</u>

Iterations	Thread Pool	Time
	(K)	(inseconds)
40	1	70
40	2	40
40	3	27
40	4	22
40	5	20
40	6	17
40	7	16
40	8	15
40	9	15
40	10	14

Task-2

Accuracy after iteration 1: 55.43% Accuracy after iteration 2: 56.60% Accuracy after iteration 3: 60.83%

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Accuracy after iteration 40: 69.03%

<u>Time Analysis:</u>

Iterations	Thread pool	Time
	(K)	(in seconds)
40	1	70
40	2	37
40	3	26
40	4	19
40	5	18
40	6	17
40	7	15
40	8	14
40	9	14
40	10	13