Assignment 7

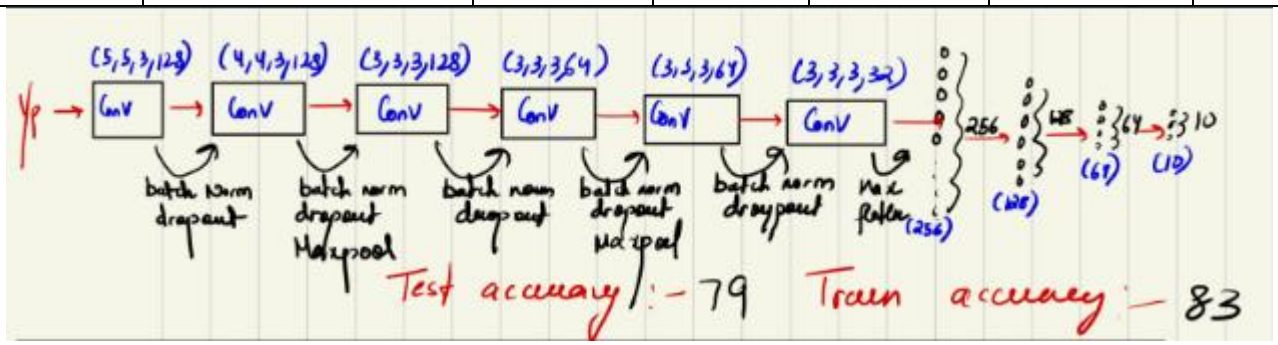
Satyam Pathak

Model	Optimizer	Batch size	Epochs	Number Of hidden layers	Training accuracy	Test accuracy
Model one	ADAM	32	10	8	83.5	73.98
Model two	RMS	32	10	9	83.97	79.03
Model three	SGD	64	10	9	60.04	59.28
Model fourth	SGD	64	10	9	59.82	58.79
Model fifth	ADAM	32	10	9	76.67	73.56
Model sixth	RMS	64	10	10	81.90	77.18
Model seventh	ADAGRAD	64	10	10	27.51	27.70
Model eight	ADAGRAD	64	10	9	26.48	26.88
Model ninth	SGD	32	10	9	31.97	31.47
Model tenth	ADAM	32	10	9	64.36	62.07
Model eleventh	Data agumentation (Adam)	32	10	8	54.92	53.79

Best Models :-

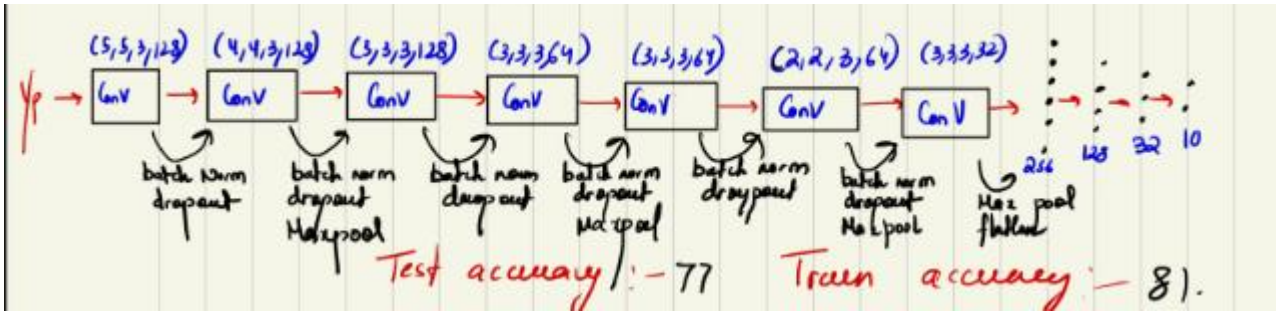
1)

Model	Optimizer	Batch size	Epochs	Number Of layers	Training accuracy	Test accuracy
Model two	RMS	32	10	9	83.97	79.03



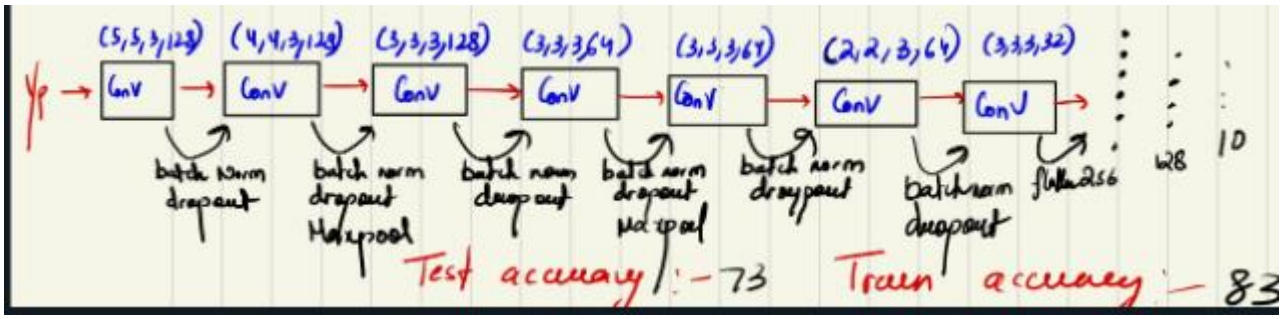
2)

Model	Optimizer	Batch size	Epochs	Number Of layers	Training accuracy	Test accuracy
Model sixth	RMS	64	10	10	81.90	77.18



3)

Model	Optimizer	Batch size	Epochs	Number Of layers	Training accuracy	Test accuracy
Model one	ADAM	32	10	8	83.5	73.98


(5,5,3,128)
(4,4,3,128)
(3,3,3,128)
(3,3,3,64)
(3,3,3,64)
(2,2,3,64)
(3,3,3,32)
Conv
batch norm
dropout
Maxpool
Flatten256
128
10
Test accuracy :- 73
Train accuracy :- 83