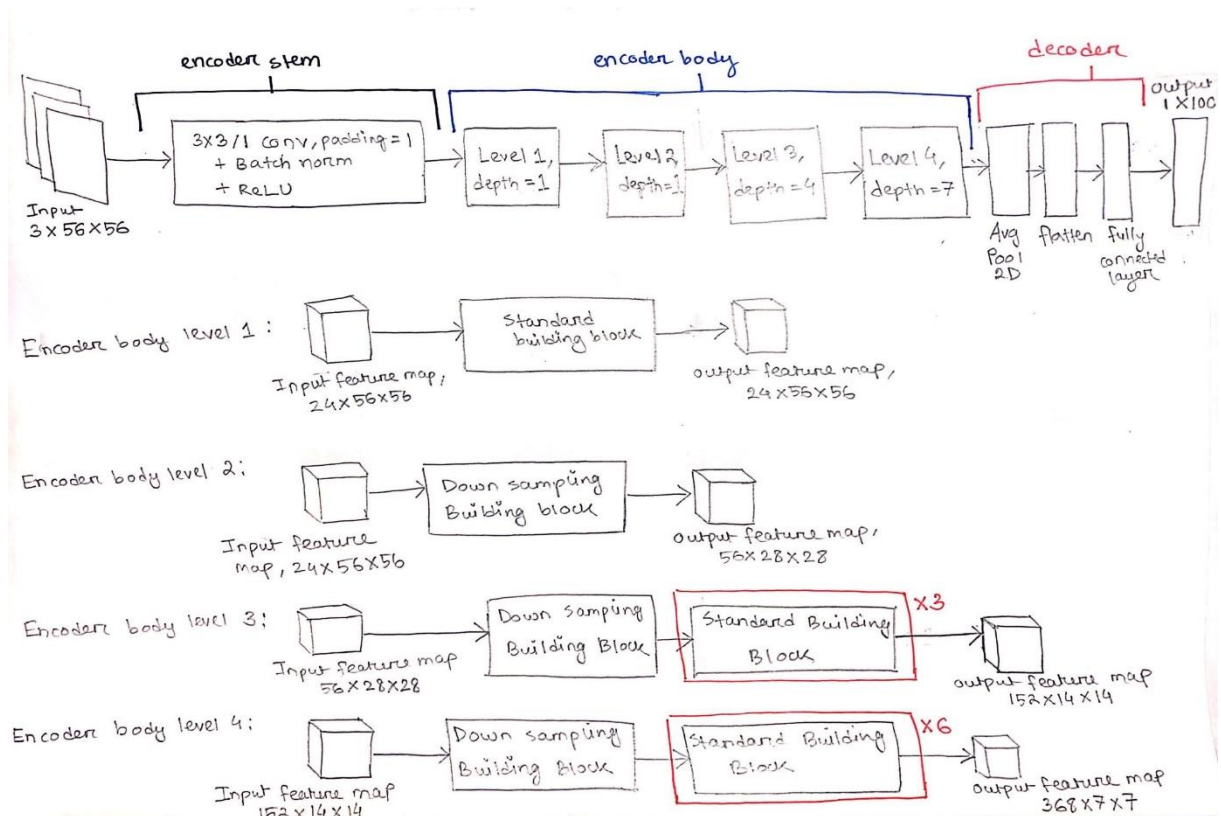


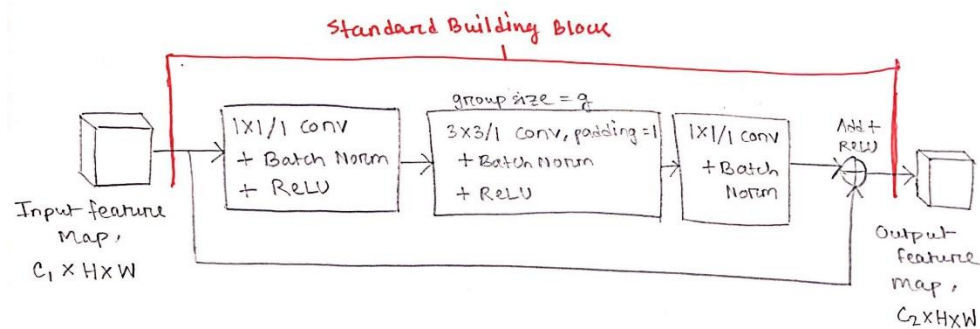
Project 02 - Networks

Section 1 - Design

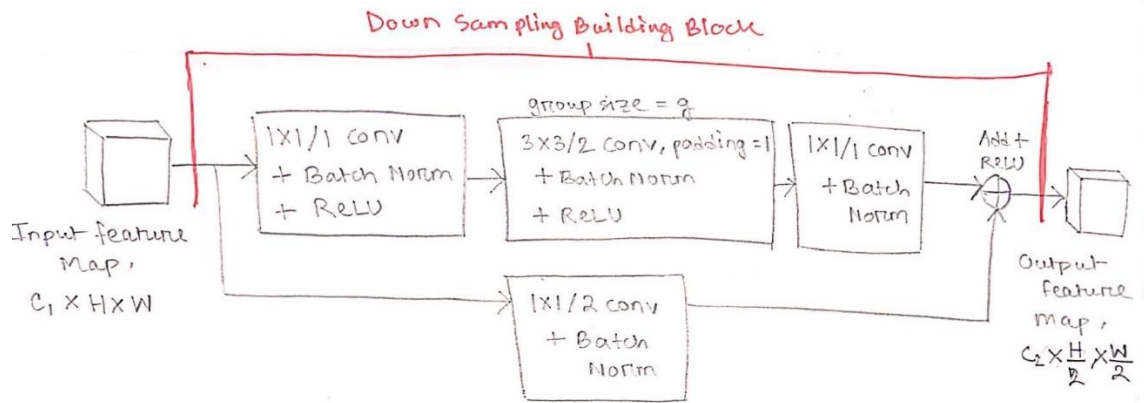
Network Structure:



Network standard building block:



Network down sampling building block:



Network section	Building block type	Number of repeats	Bottleneck ratio	Number of input channels	Number of output channels	Group size	No. of groups per 3x3 conv
Encoder stem	Encoder stem block	1	--	3	24	--	--
Encoder body level 1	Standard building block	1	1	24	24	8	3
Encoder body level 2	Down sampling building block	1	1	24	56	8	3
Encoder body level 3	Down sampling building block	1	1	56	152	8	7
	Standard building block	3	1	152	152	8	19
Encoder body level 4	Down sampling building block	1	1	152	368	8	19
	Standard building block	6	1	368	368	8	46
Decoder	Decoder block	1	--	368	1 (1 channel with 100 data points)	--	--

Section 2 – Training

Number of epochs = 125

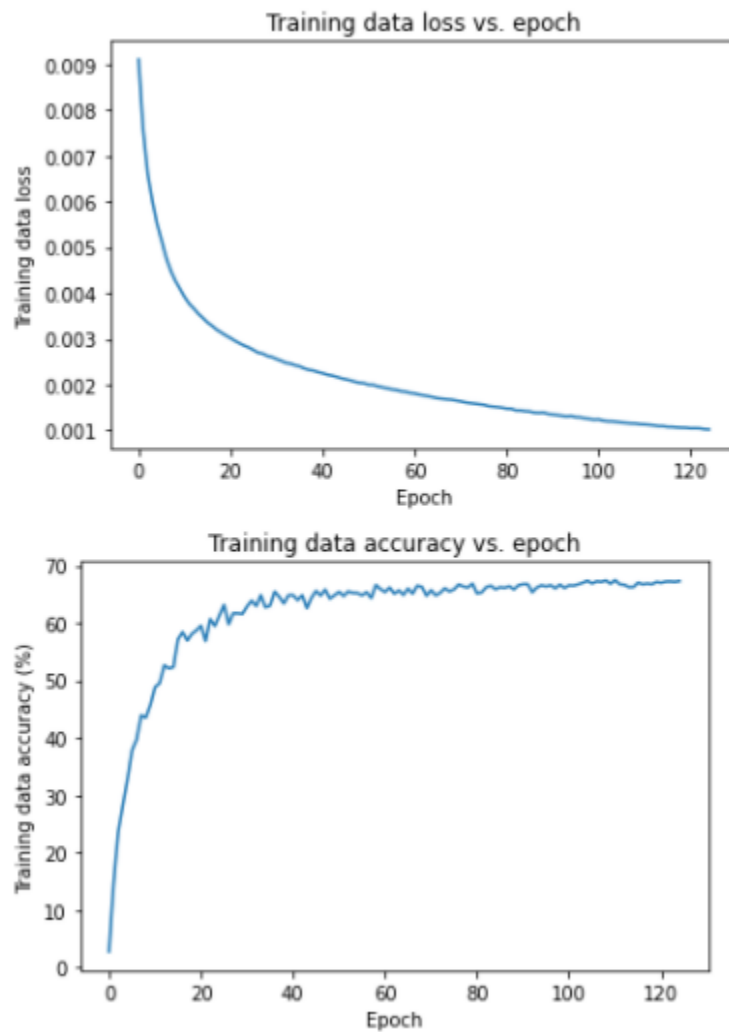
Batch size = 512

Learning rate = linear warmup for 5 epochs followed by cosine decay for 120 epochs

Error criterion = softmax cross entropy

Optimizer = Adam

Weight decay (l_2 norm) = 0



Final accuracy = 67.32 %