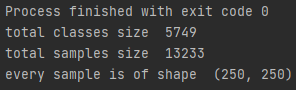
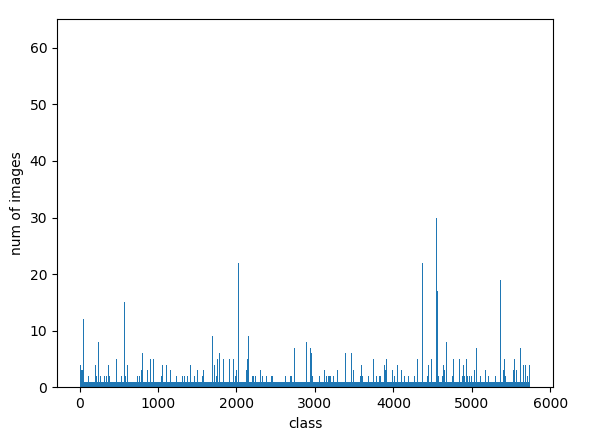
Assignment 2

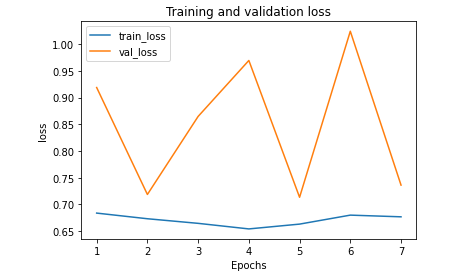
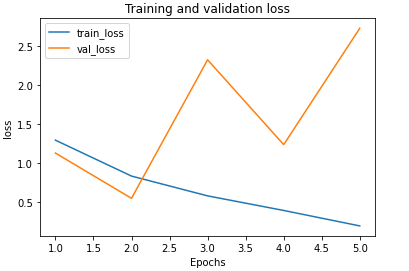
DataSet

* 
* 

Notes:

* Used as reverence the VGG architecture (first few layers) since images are with similar size (224^2) trained on ImageNet DB and our images are also in the same domain (faces)
* Foreach twin’s net used final activations as Sigmoid as described in Paper, all other activation are RELU similar to VGG

Incremental Improvements:

* Started with Weights initialization from N(0,0.01) got accuracy on Validation set ~ 0.625
* Set to Xavier weight initialization and improved to 0.65 accuracy
  + 
* Added BN and Model started to learn Val\_acc = 65%
* Decided to use Test set for validation (epochs) due to few data + this way we will get Test results on every epoch and can decide when to stop
* Added learning regularization l = 0.9\*l
  + 
* Resize last FC layers from 1024 to 4096