Exercise Sheet 09
Distributed Data Analytics
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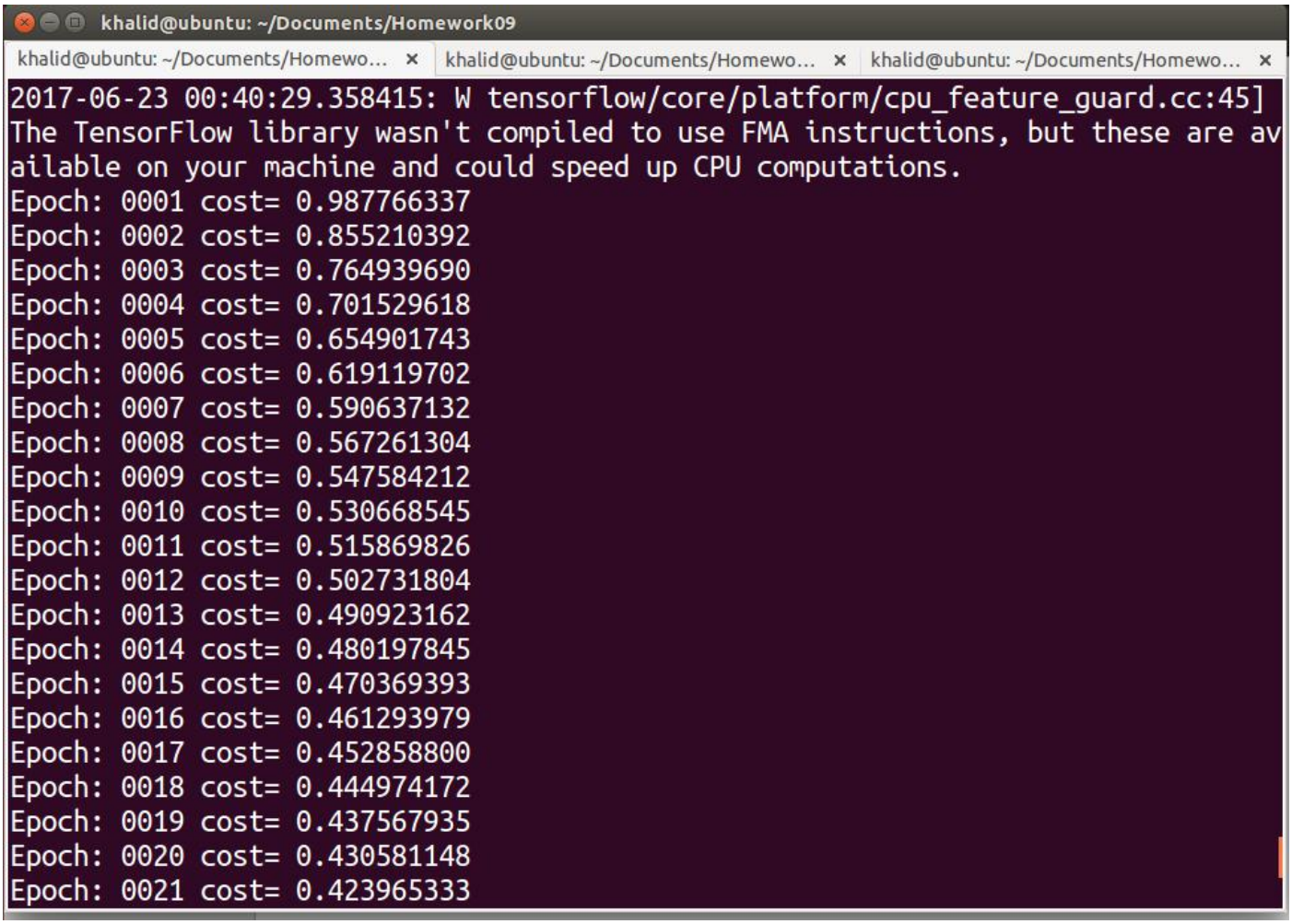
Note : The codes are provided in the respective folders

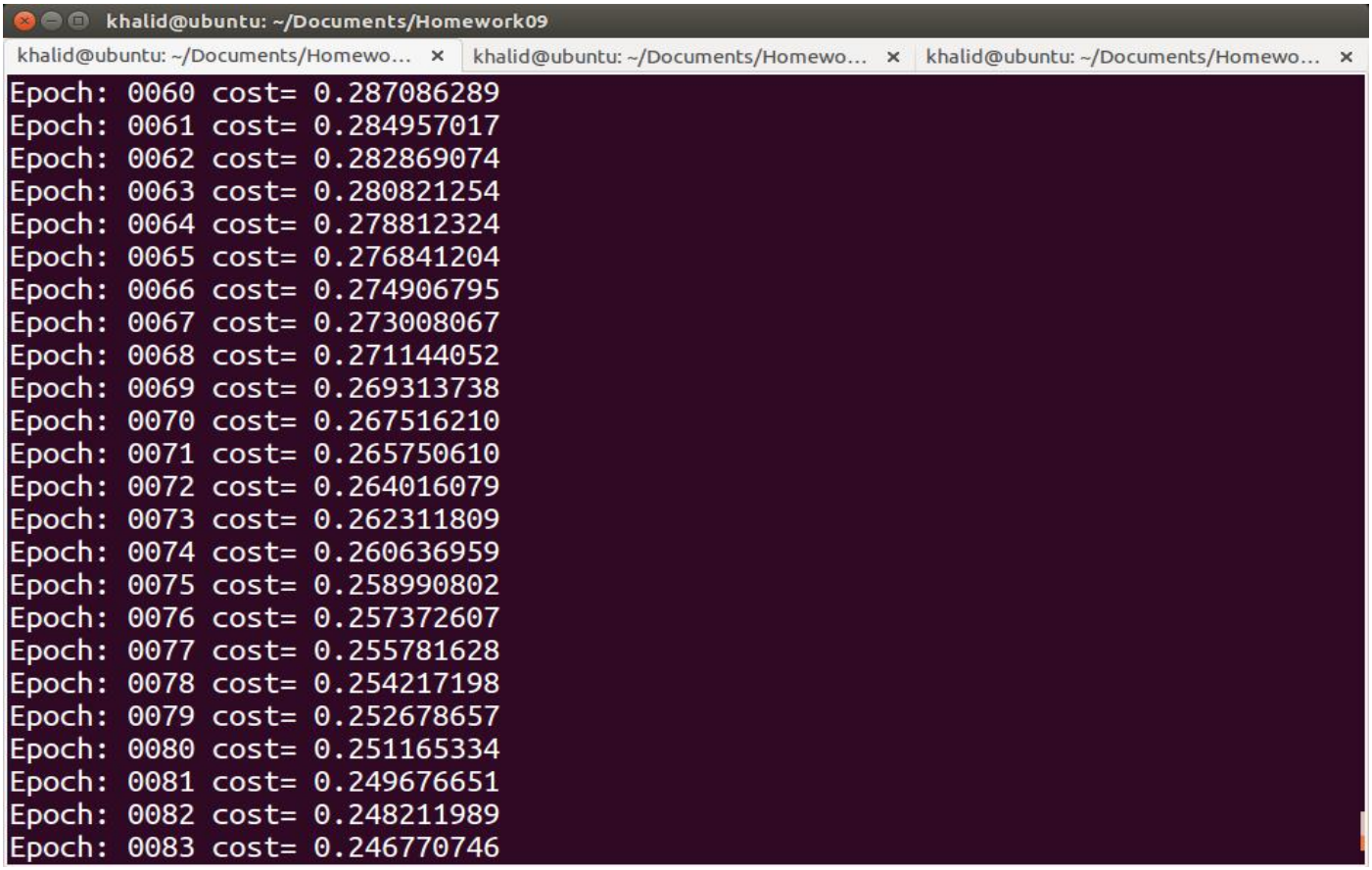
Exercise 1: Logistic Regression on Iris Dataset

Output:

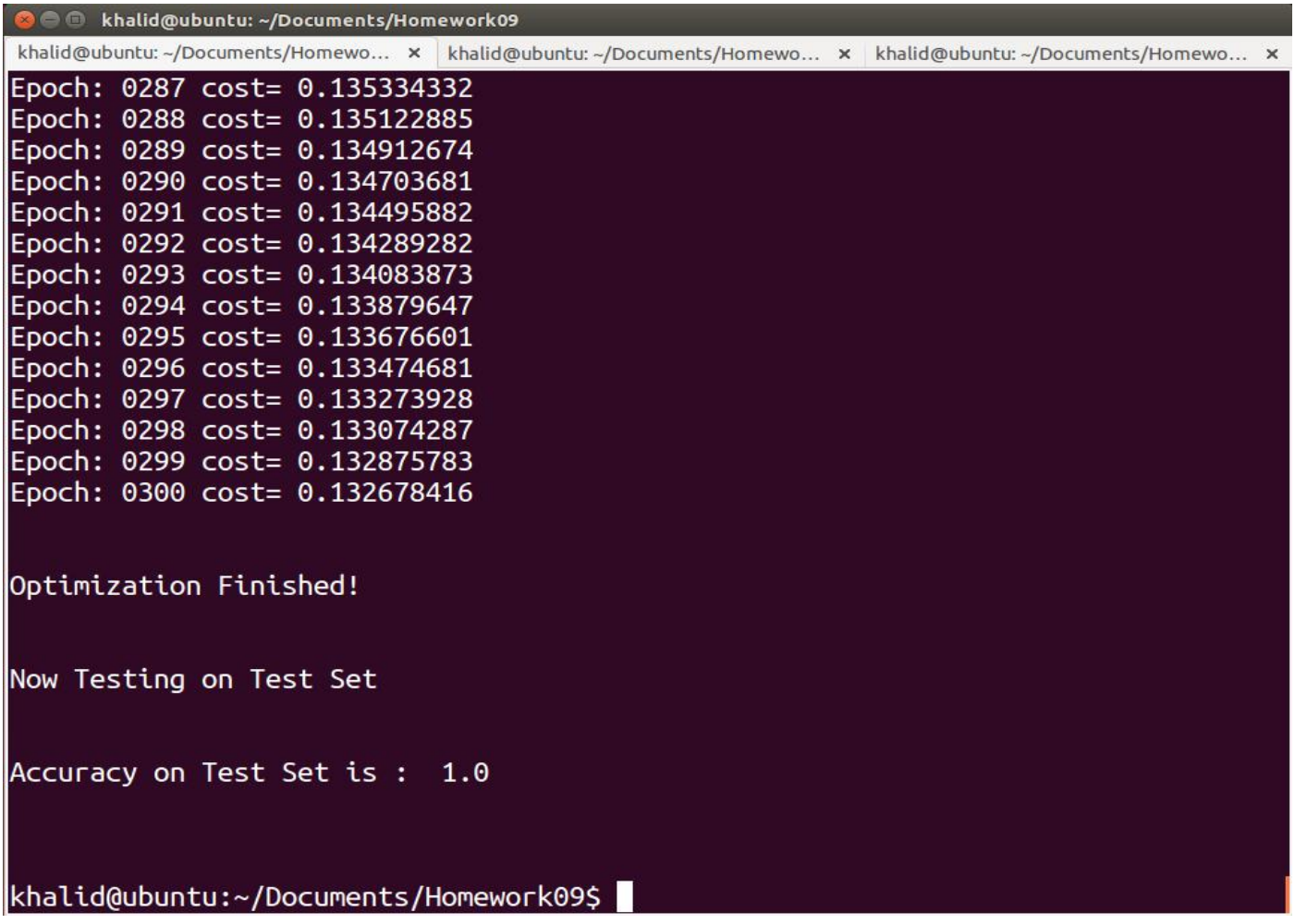
When the program first starts, the loss is big. But as we run more epochs, the cost starts to decrease and accuracy continues to increase.



As we can see, the cost continues to decrease



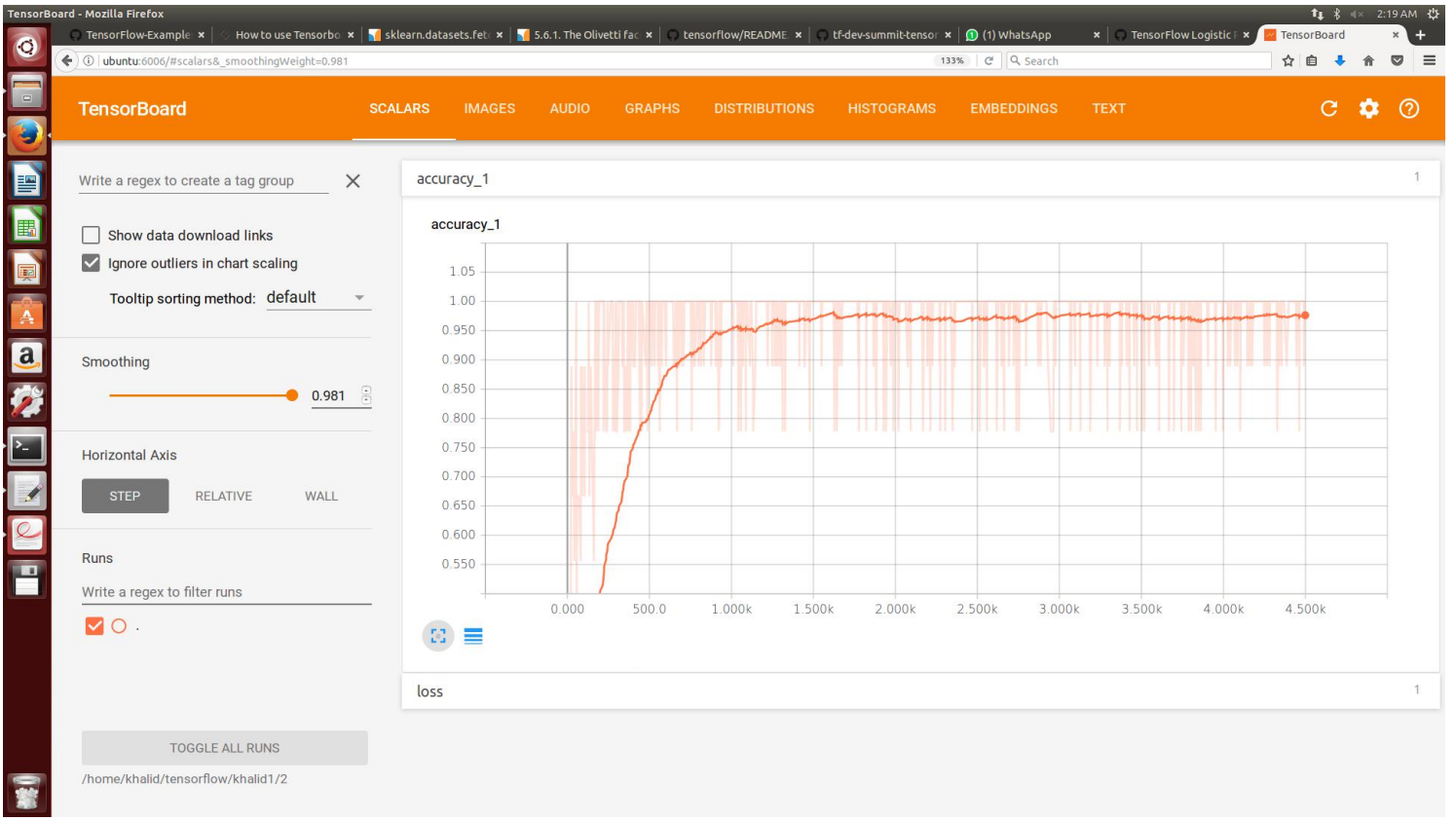
Here, I have tested the data on the test set, and the result are as follows, Accuracy is 100%



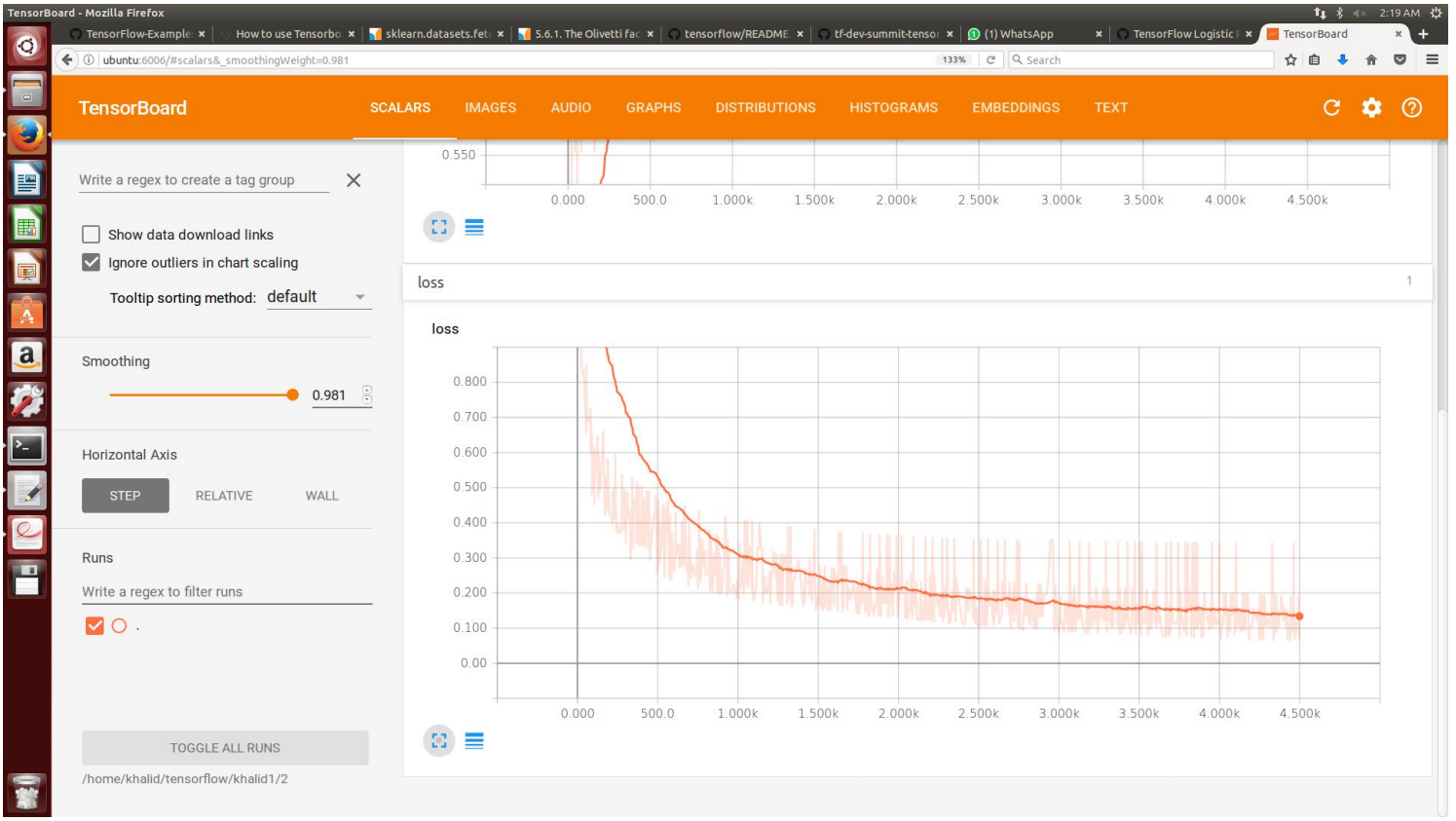
Scalar Values:

Below are the scalar values for Accuracy and Loss in the TensorBoard.

Accuracy:



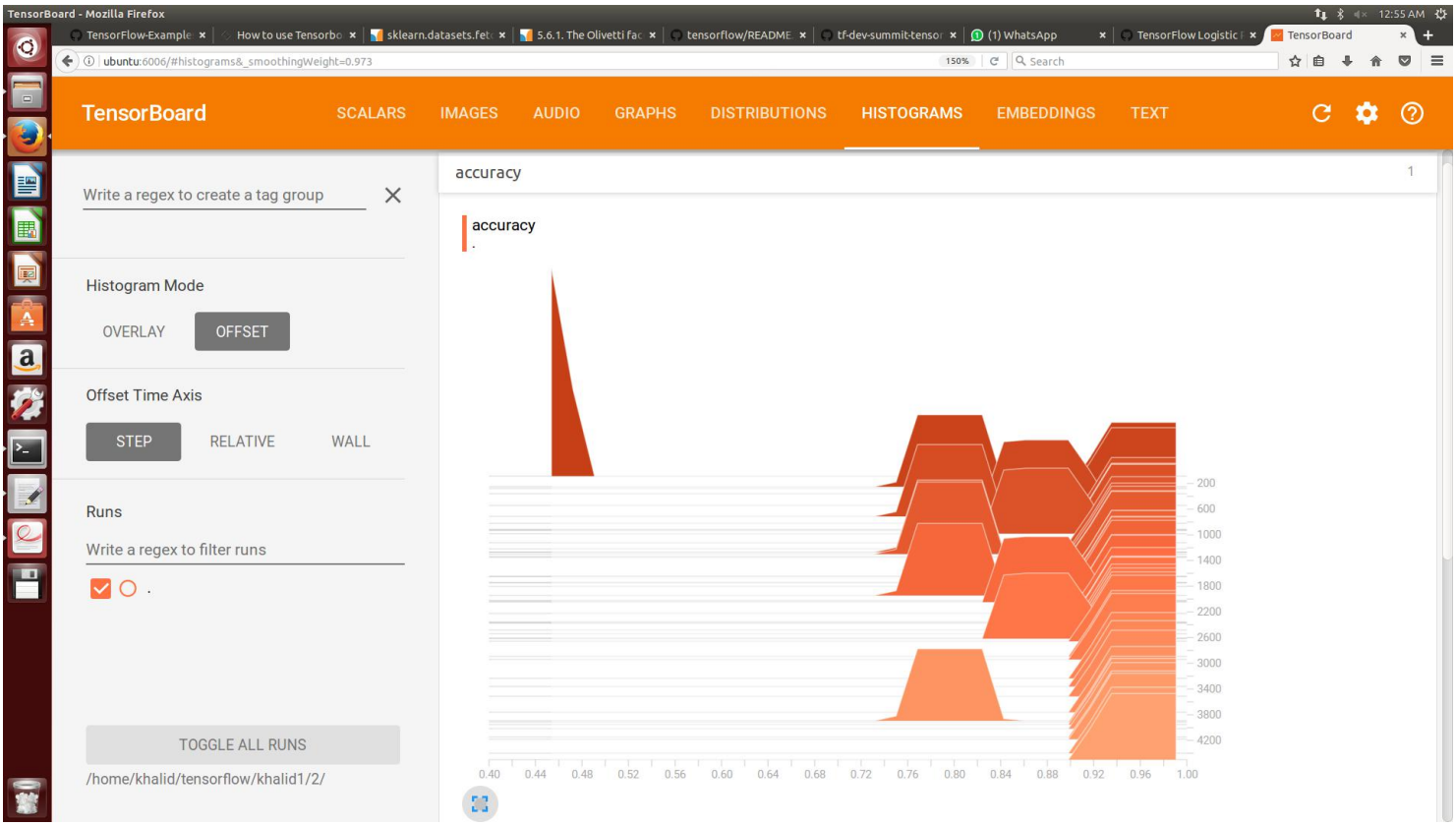
Loss:



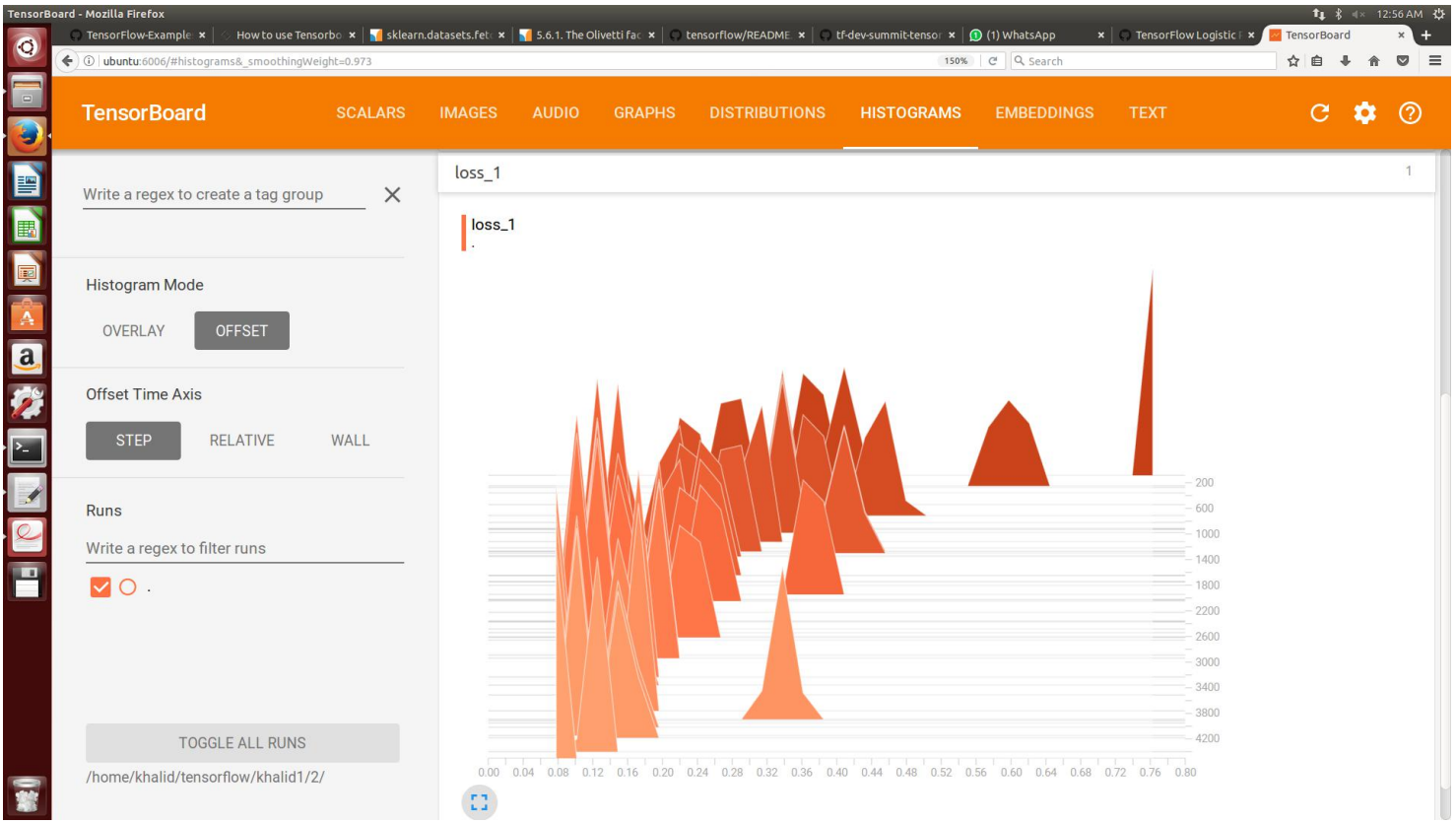
Histogram:

Below are the Histograms for Accuracy and Loss

Accuracy:



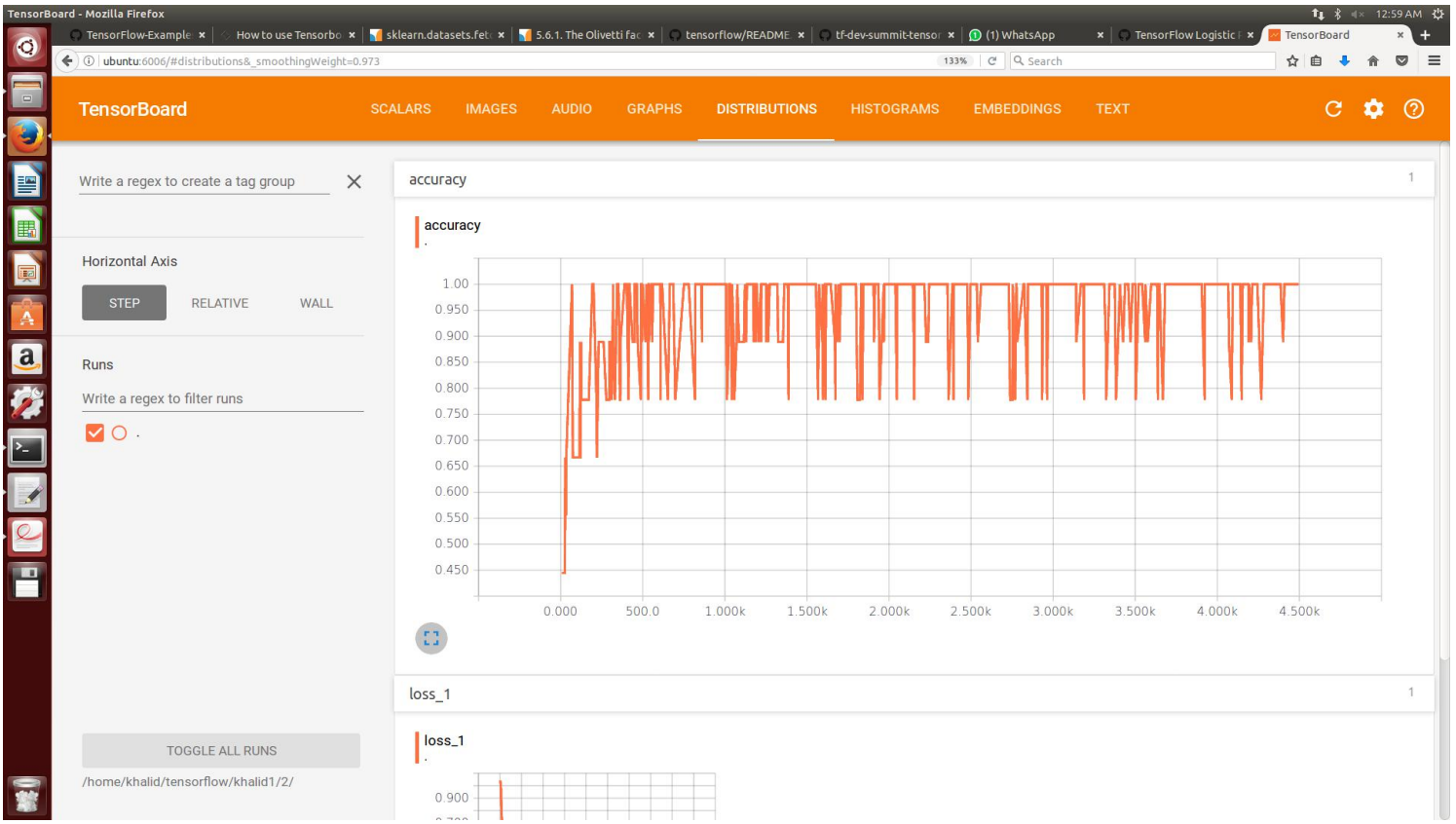
Loss:



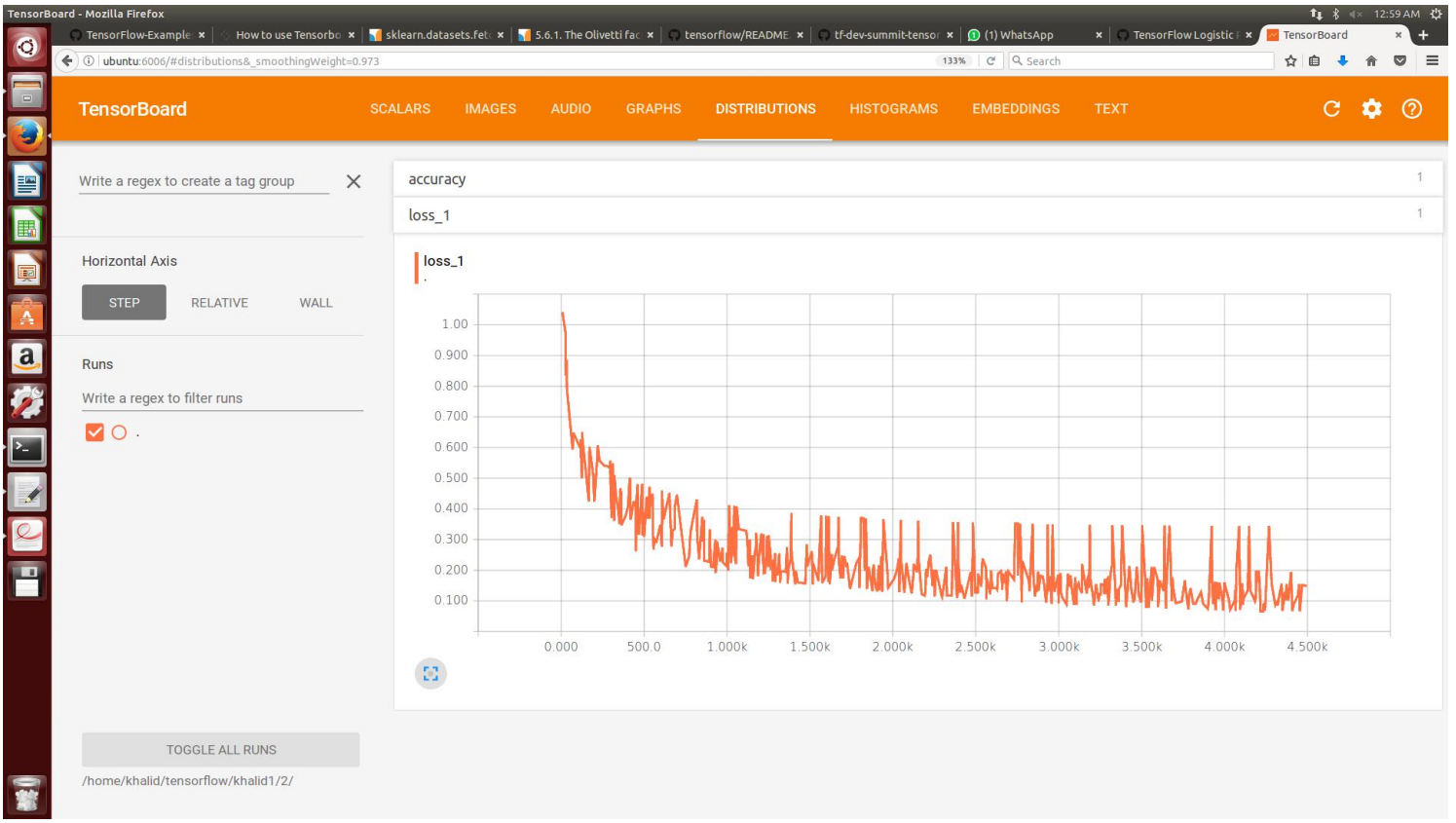
Distributions:

Below are the distribution values for Accuracy and Loss.

Accuracy:

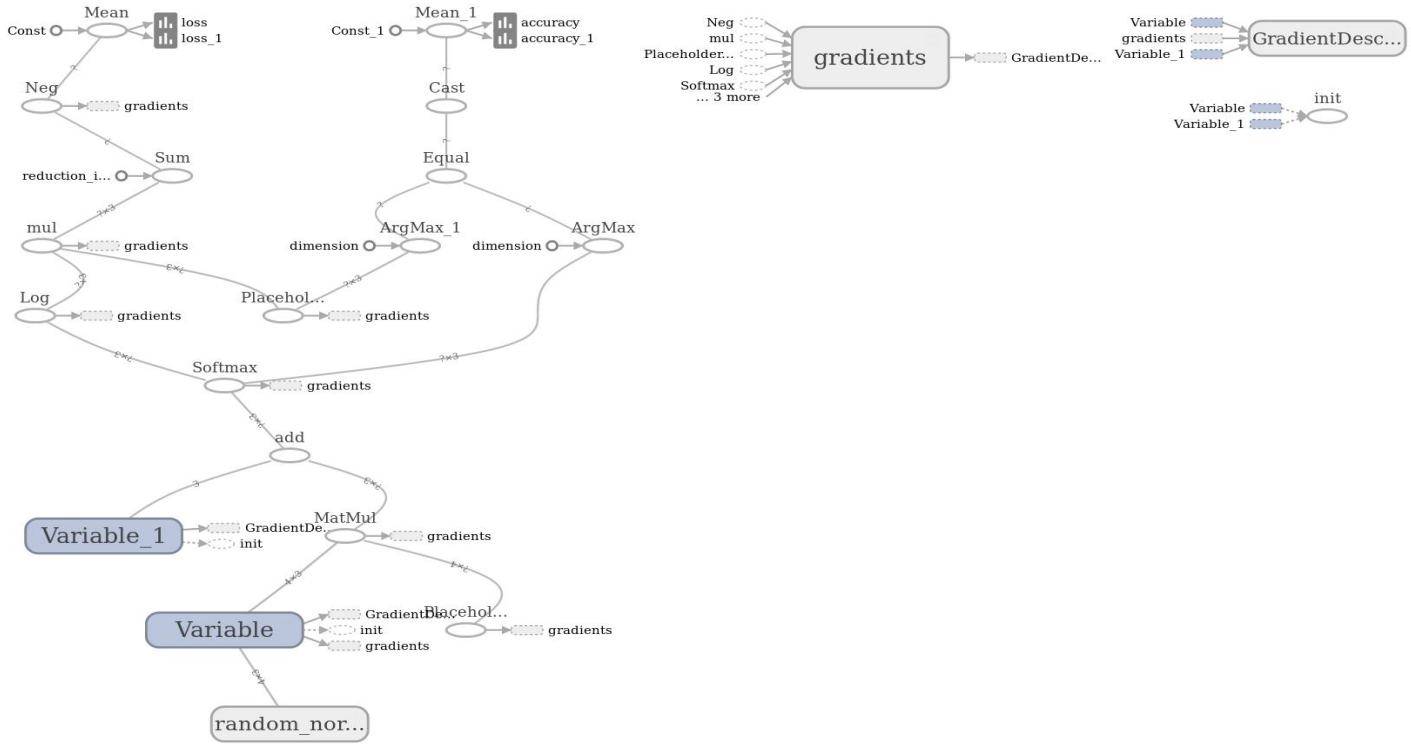


Loss:



Graph:

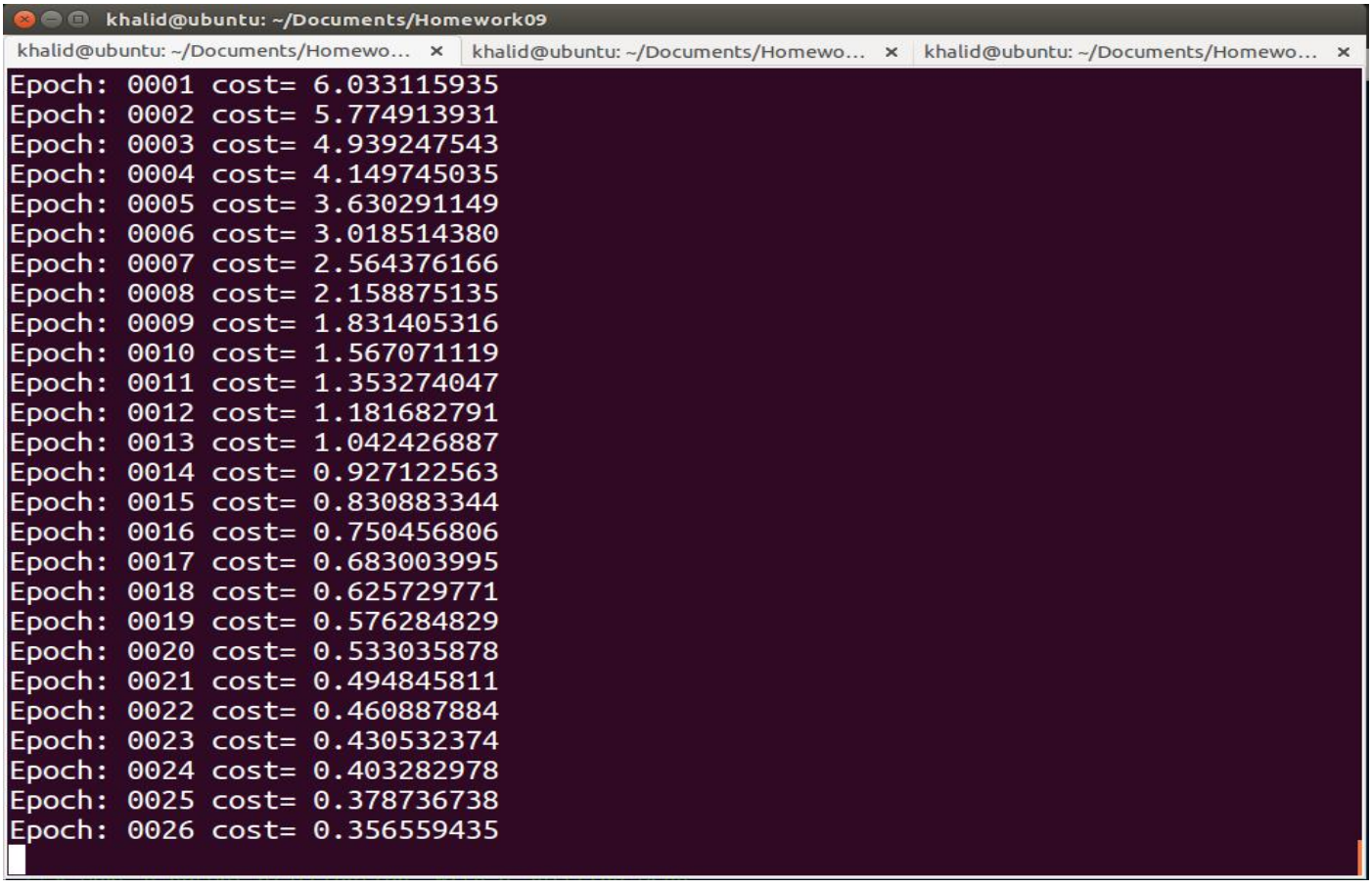
Below is the Tensor graph of the TensorBoard.

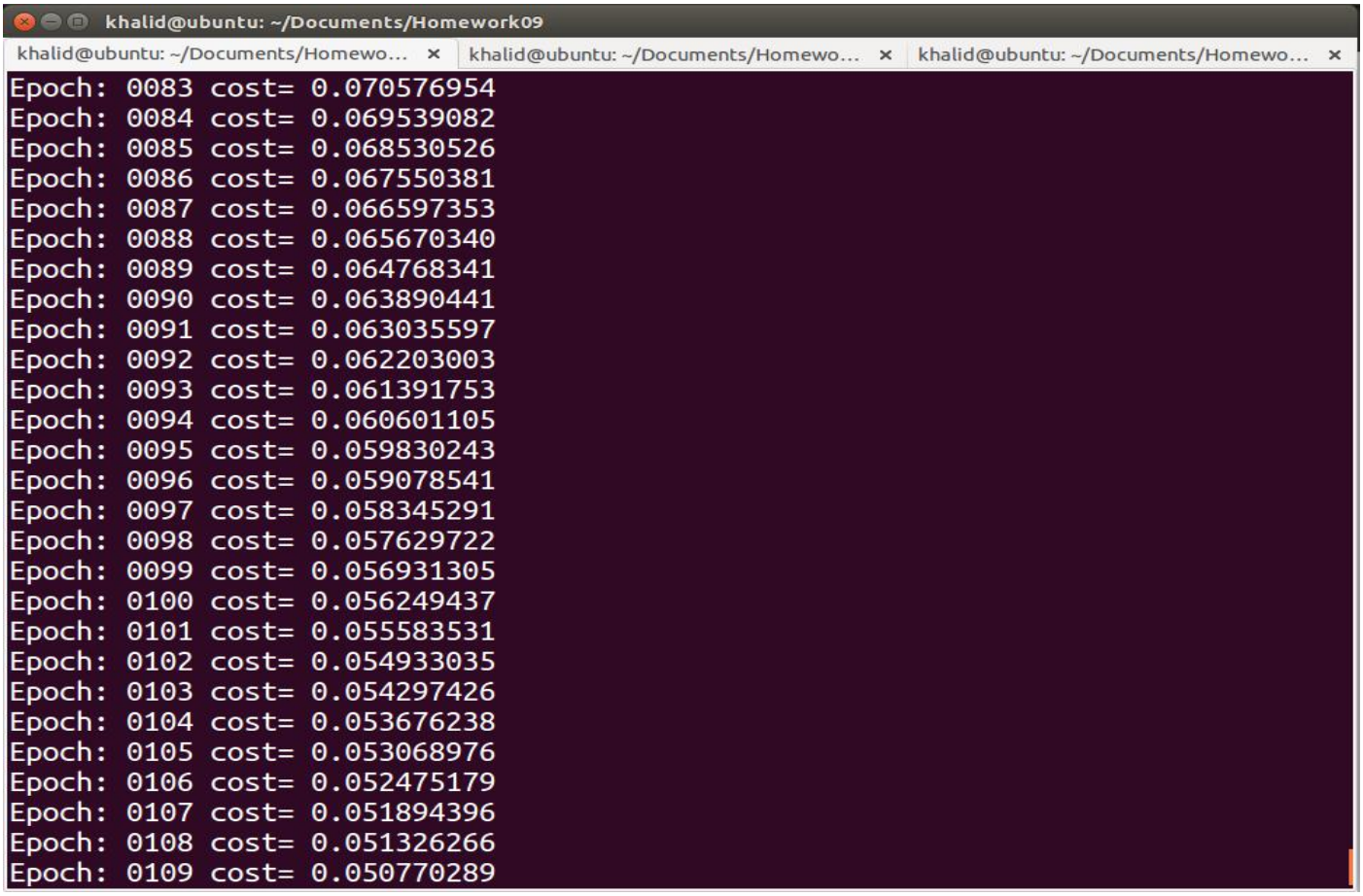


Exercise 2: Logistic Regression on Olivetti faces Dataset:

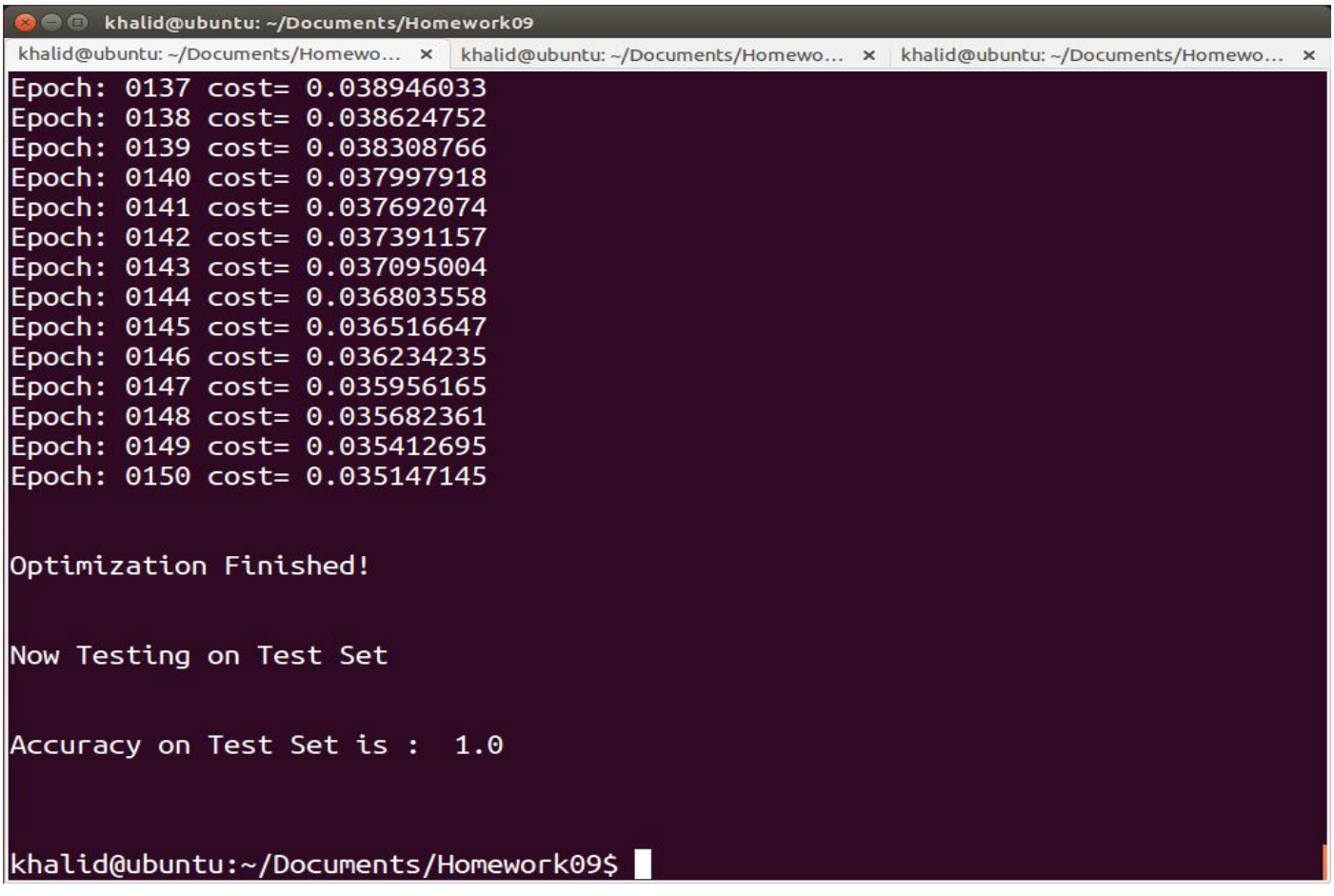
Output:

When the program first starts, the loss is big. But as we run more epochs, the cost starts to decrease and accuracy continues to increase.





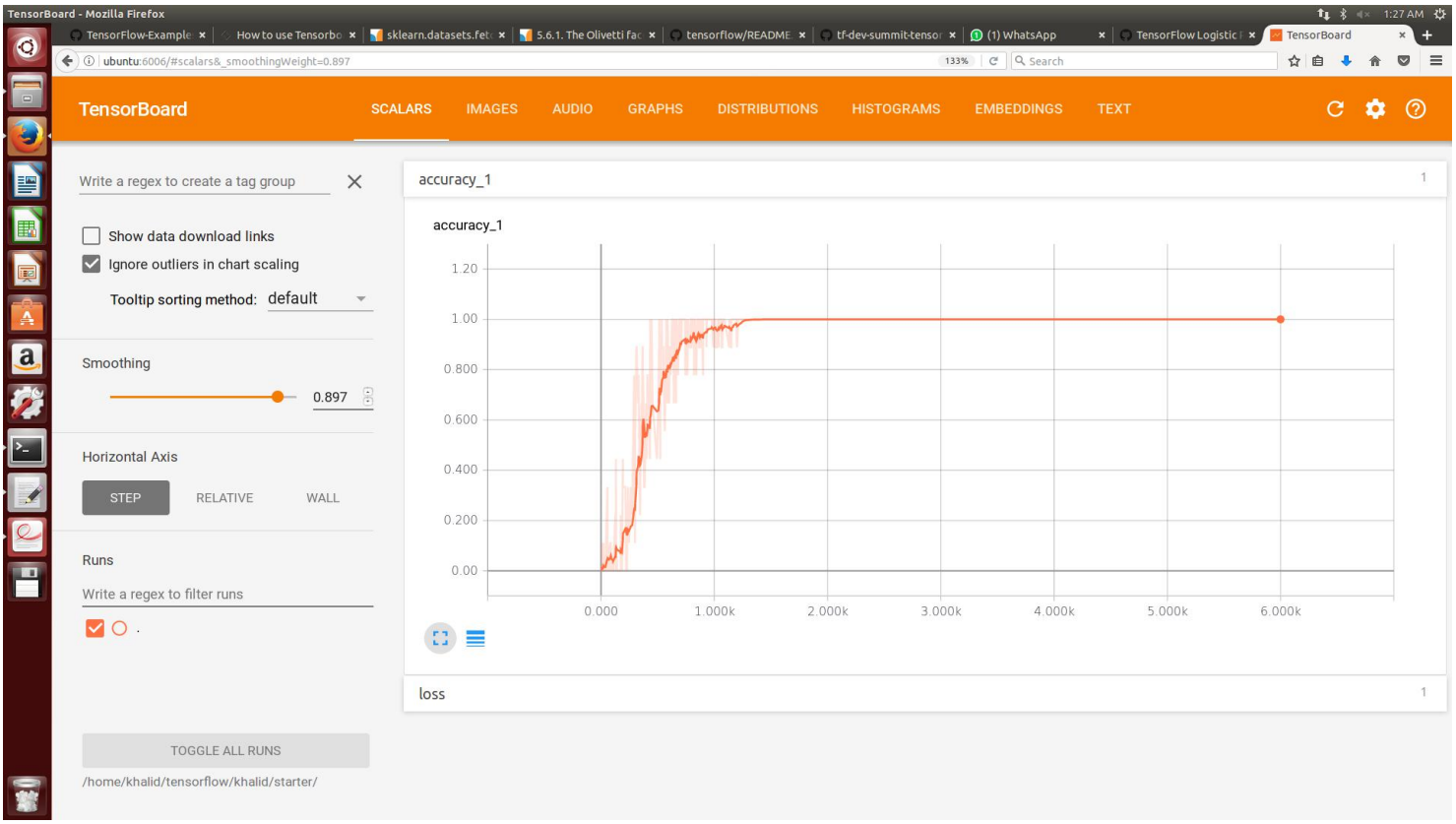
In the final result, I have tested the trained model on the test dataset. The Accuracy is 100%. The cost has gone down to 3.5%



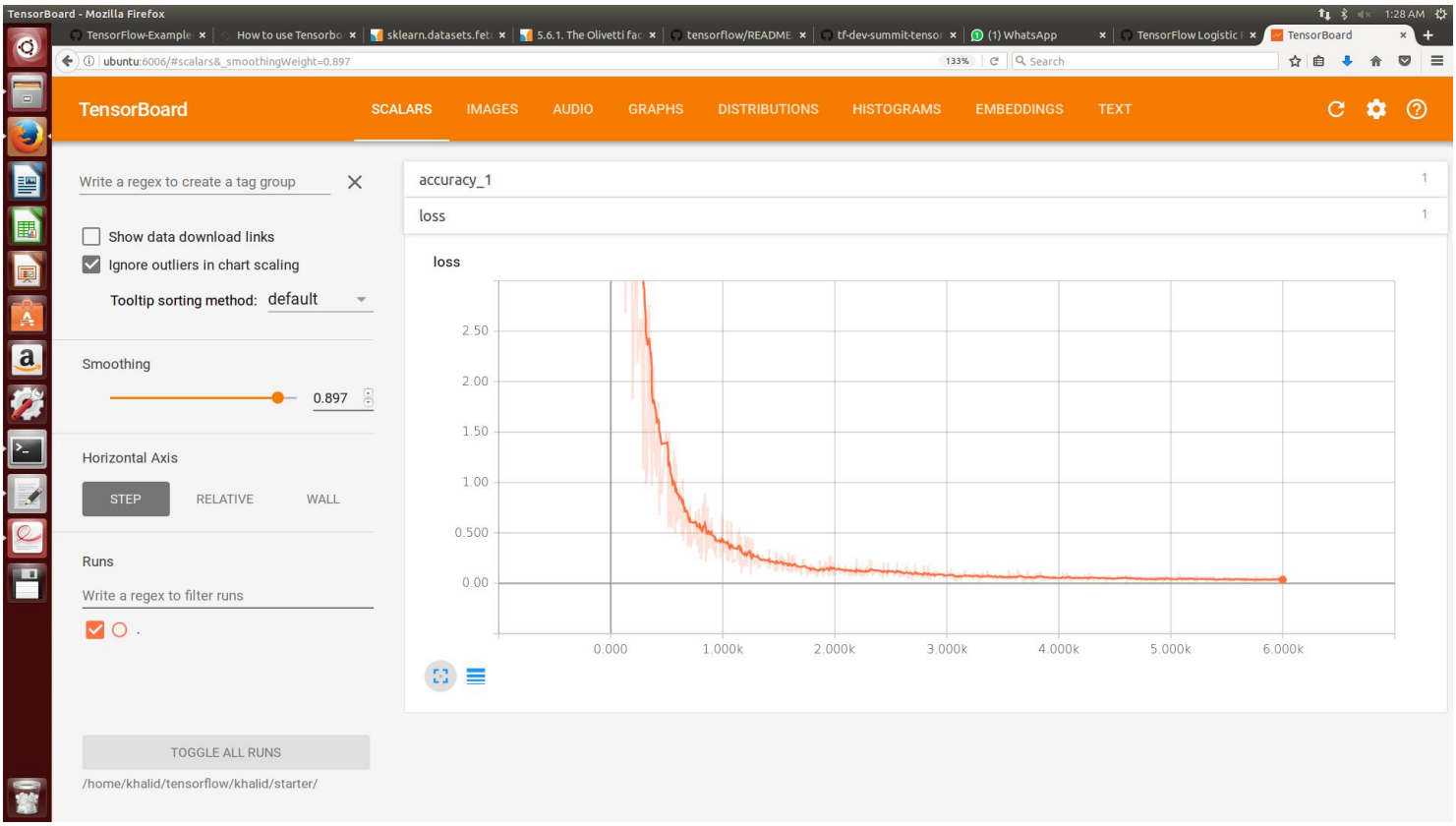
Scalar Values:

Below are the scalar values for Accuracy and Loss in the TensorBoard.

Accuracy:



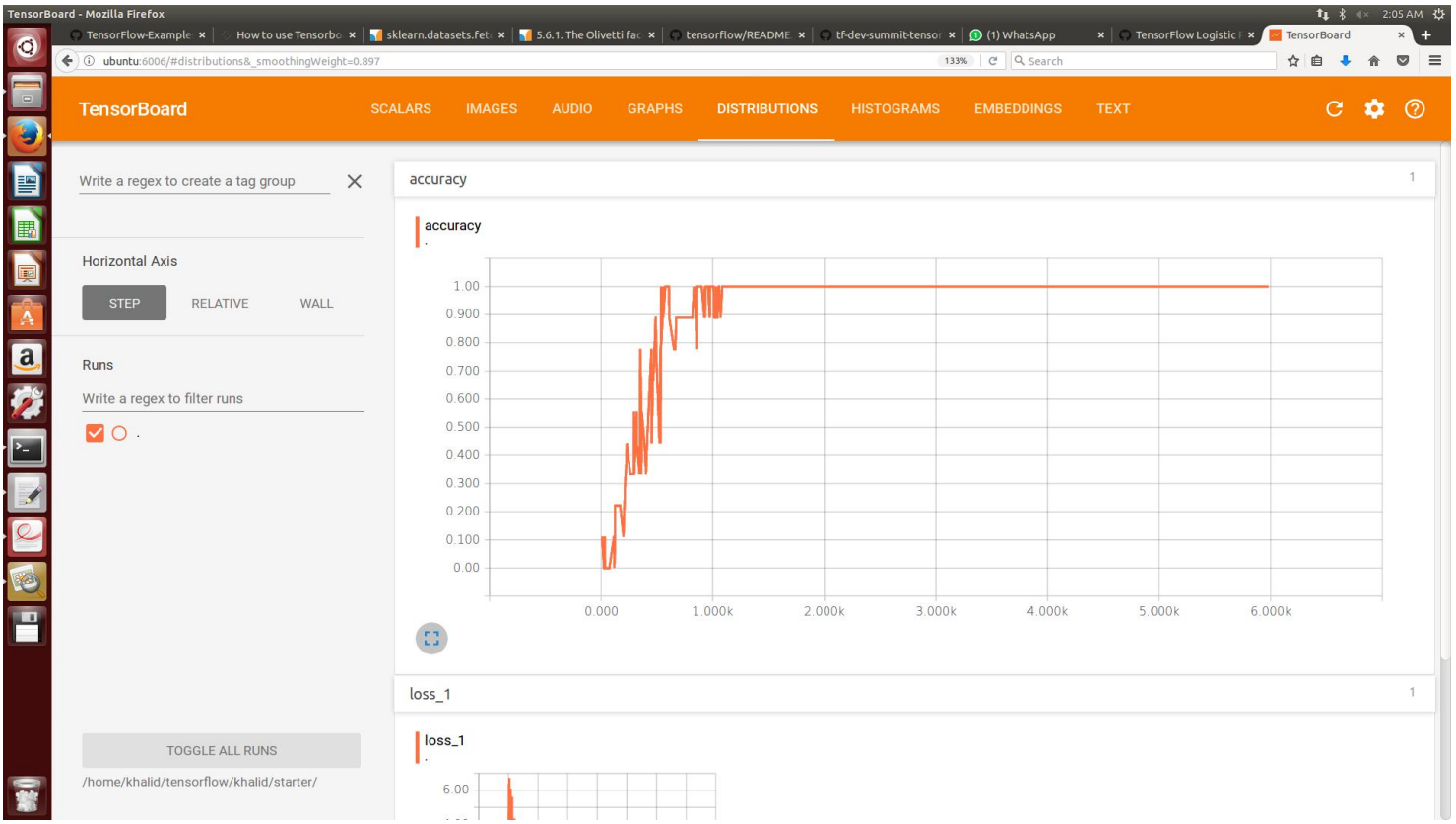
Loss:



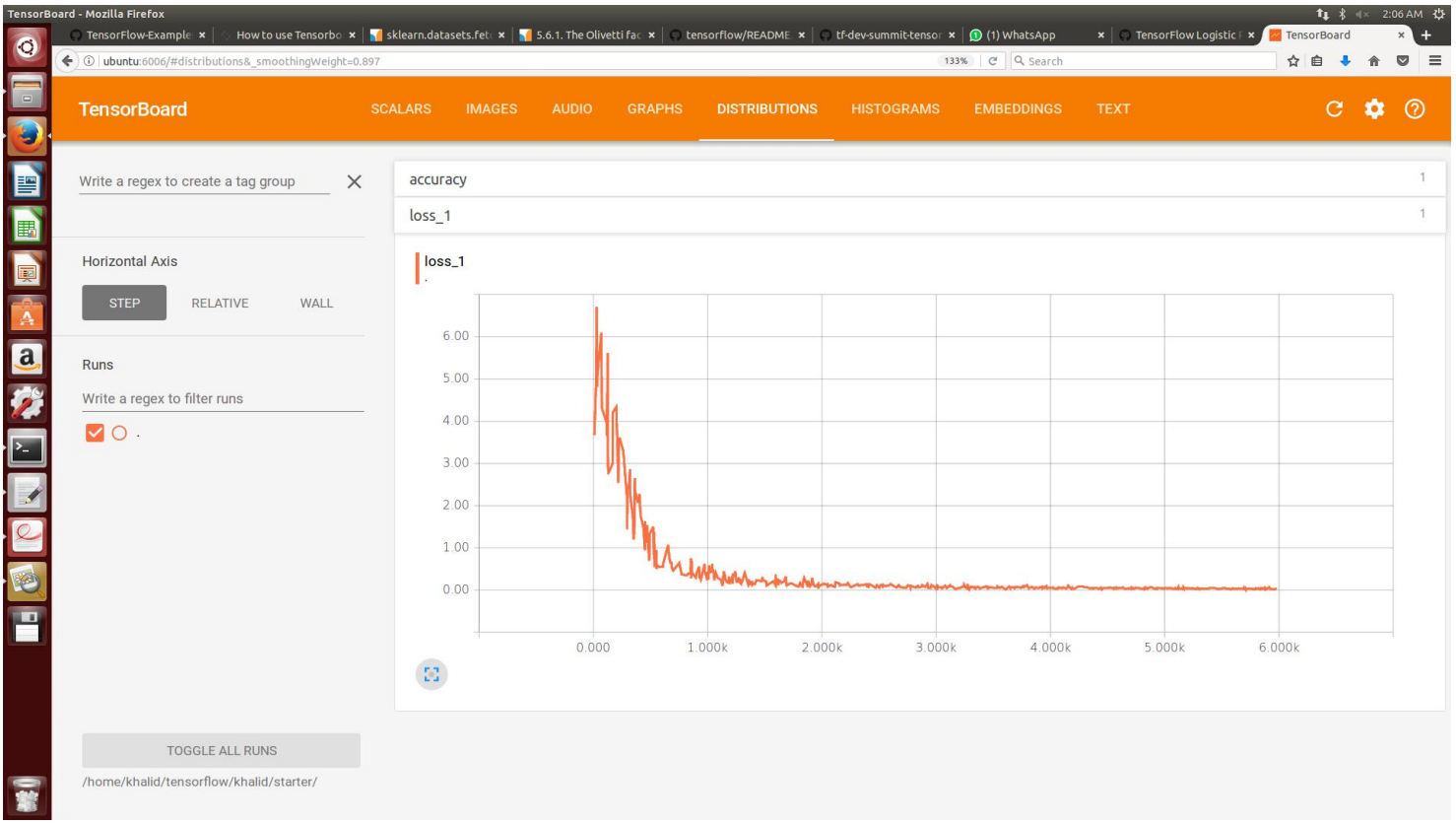
Distributions:

Below are distribution values for Accuracy and Loss respectively.

Accuracy:



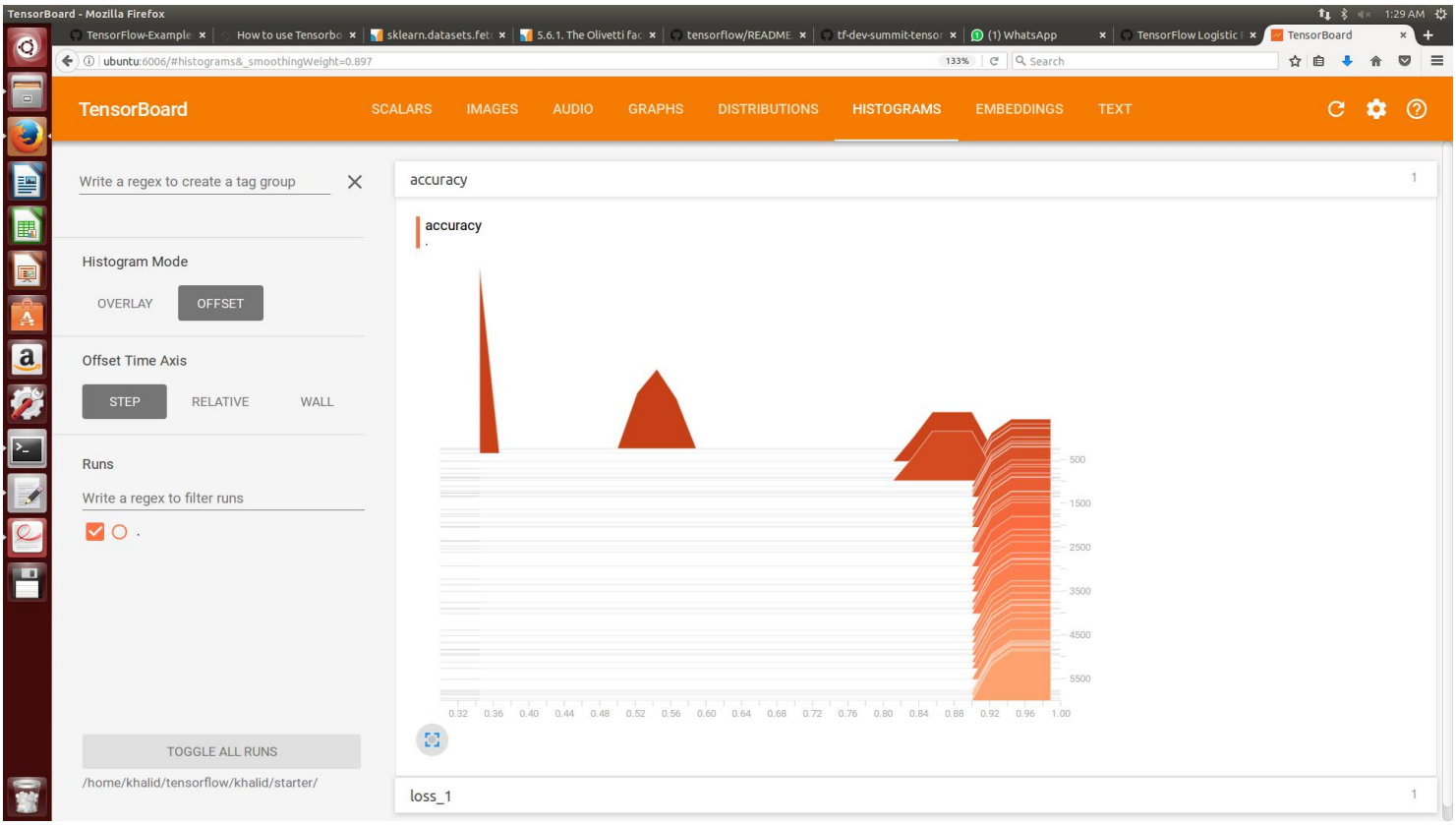
Loss:



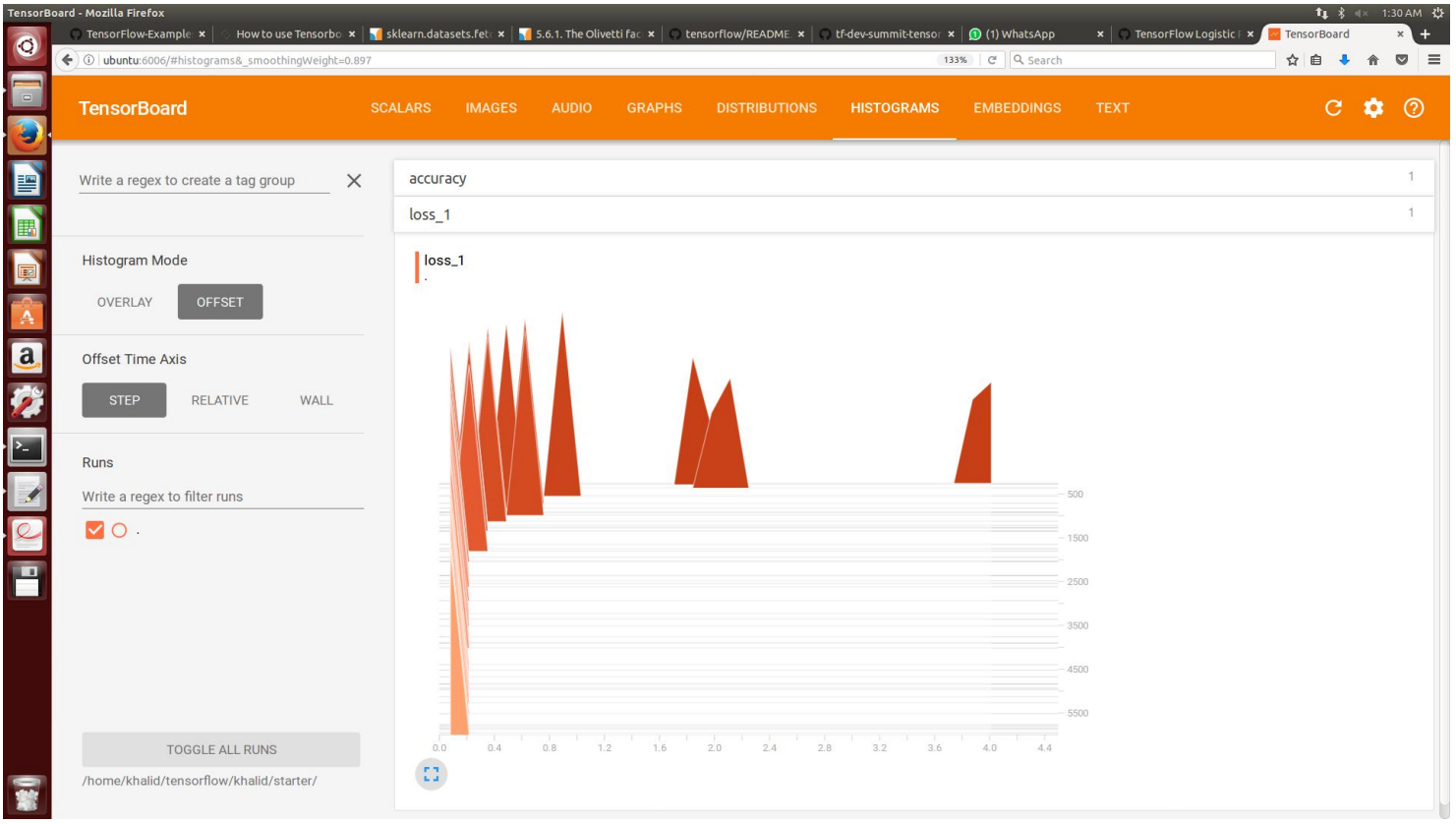
Histograms:

Below are histograms for Accuracy and Loss.

Accuracy:



Loss:



Graph:

Below is the Tensor graph of the TensorBoard.