**Report**

In this task I was able to train my multi-layer neuron on the dataset of horse racing. I did it in the following steps.

1. Cleaned the dataset
   1. Removed all the columns with no values
   2. Empty cells filled with the mean value of the column
   3. And if value is –ve then it was replaced by 0 else by 1.
2. Defined the class of MLP with its functions using the concepts delivered in class and the document provided.
3. Tried to do the evaluation of the dataset but failed eventually as compiler was throwing error Y contains Nan value while, I had cleaned the dataset properly, I also googled this issue but all in vein.
4. As the values in the dataset were not clear and the there was no direct link present between the columns, so I choose the first two columns and *horse\_id,* *calc\_position* and *race\_id* as inputs for my MLP and as for the outputs I choose *price* as the output of the MLP. But the problem I faced as the data was too large I wasn’t able to one hot encode it. So I left it there and implemented the code after that by taking three inputs one output with 2 hidden neurons as my data was not in binary the answers coming out were Nan and after that I also wrote the code of evaluating model but wasn’t able to check its working due to one hot encode problem above. And that’s all.

