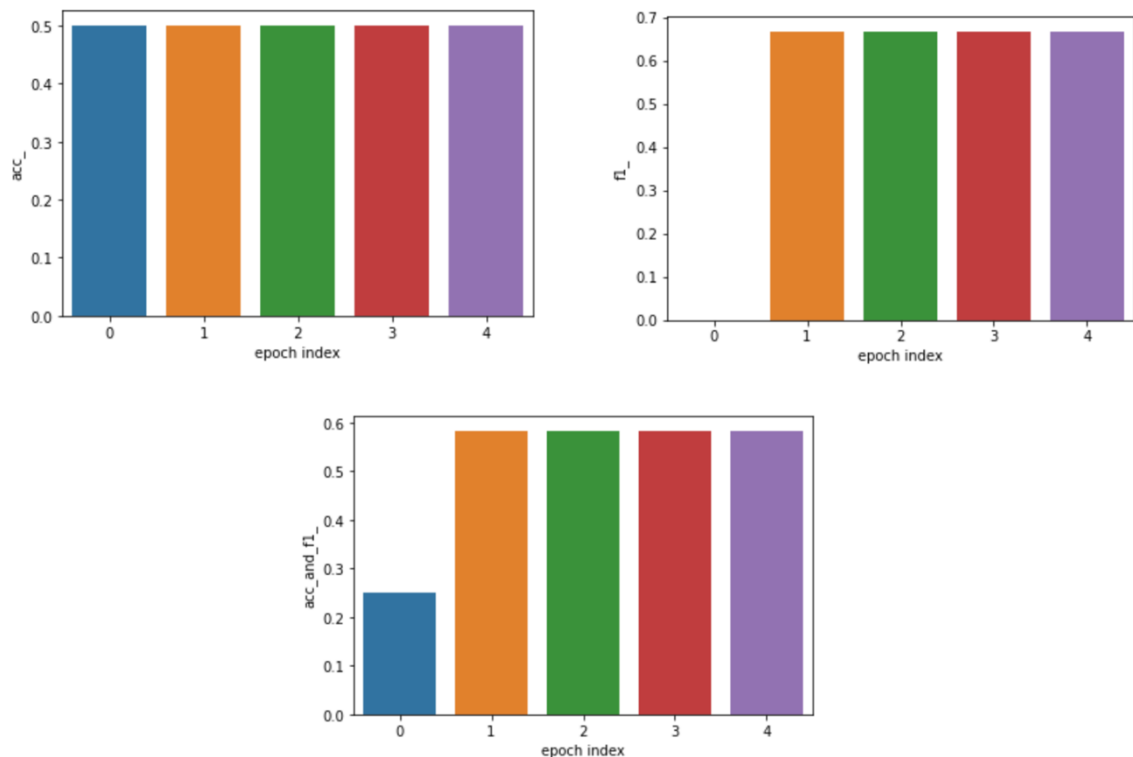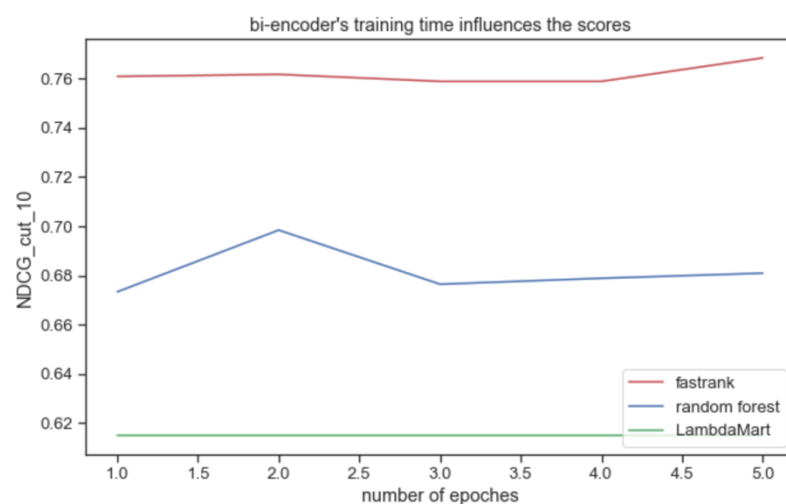# *Optional TODO*: Evaluating the different models

Part 1:

Due to time limitation, I only did 5 epochs. From the plot, we can find that the accuracy does not change with the increasing of the number of epochs. F1 increases from 0 to 0.66 and does not change much after epoch 2.

Part 2:

With the increases of epochs, F1 performance also increases in the first two epochs. However, from the plot above I found that increasing F1 performance does not necessarily lead to increasing NDCG@10. For fastrank, the value of NDCG@10 has an increasing tendency. For random forest, the value of NDCG@10 drops when the number of epochs goes to 3. For LambdaMart, the value of NDCG@10 does not change at all.

According to the increasing tendency of the value of NDCG@10 for fastrank, I guess maybe at least 15 epochs will be needed to train to maximize performance.