In this project, we will predict RBP-binding RNA sequences using a neural network model based on CNN (B. Alipanahi, et al. "Predicting the sequence specificities of DNA- and RNA-binding proteins by deep learning", Nature Biotechnology, 33, pages831–838 (2015)).

1) Build CNN models for predicting the RBP-binding RNA sequences (ALKBH5 and ELAVL1).  
2) Train your model using the training dataset (and optimize your model using validation set).  
3) Report the ROC-AUC score of the test dataset using the trained model.  
4) Use google colab (or whatever you want)  
5) Upload  jupyter notebook (".ipynb" file) or link to your google colab code

Due data: Oct/11th 23:59pm

Grading criteria (10pt total):

- It runs anyway... --> 5pt

- Properly optimize the models --> 2pt

- Good performance --> 2pt

- Nice and proper comments --> 1pt

- It's a beautiful code! --> +3pt