Notice:

1. All the training should be run on a P100 Google colab instance as code is optimized for utilizing 16GB VRAM.
2. The “zindi_cgiar_wheat_growth_stage_challenge” folder should be placed on the google drive root directory such as:
   /content/gdrive/My Drive/zindi_cgiar_wheat_growth_stage_challenge/
3. If the colab notebook gets stuck during training, restart the runtime and run again. [This is a very rare case but can be happened. It is not due to the errors within the code but due to the notebook environment itself]

How to generate the solution:

Step-1:

Store all the competition original data in zindi_data folder such as:

1. /content/gdrive/My Drive/zindi_cgiar_wheat_growth_stage_challenge/zindi_data/Images.zip
2. /content/gdrive/My Drive/zindi_cgiar_wheat_growth_stage_challenge/zindi_data/SampleSubmission.csv
3. /content/gdrive/My Drive/zindi_cgiar_wheat_growth_stage_challenge/zindi_data/Train.csv

Step-2:

Next run the following ipynb file:

/content/gdrive/My Drive/zindi_cgiar_wheat_growth_stage_challenge/prepare_zindi_npy_data.ipynb

to generate train and test dataset numpy data. All numpy datas will be stored in the zindi_npy_data folder.

Step-3:

Now, run all the ipynb files stored in those following folders-

1. /content/gdrive/My Drive/zindi_cgiar_wheat_growth_stage_challenge/train_lq2_only_effnet_b1_step1/
2. /content/gdrive/My Drive/zindi_cgiar_wheat_growth_stage_challenge/train_lq2_only_effnet_b2_step1/
3. /content/gdrive/My Drive/zindi_cgiar_wheat_growth_stage_challenge/train_lq2_only_effnet_b3_step1/
4. /content/gdrive/My Drive/zindi_cgiar_wheat_growth_stage_challenge/train_lq2_only_effnet_b4_step1/
5. /content/gdrive/My Drive/zindi_cgiar_wheat_growth_stage_challenge/train_wd_effnet_b1/
6. /content/gdrive/My Drive/zindi_cgiar_wheat_growth_stage_challenge/train_wd_effnet_b2/
7. /content/gdrive/My Drive/zindi_cgiar_wheat_growth_stage_challenge/train_wd_effnet_b3/

Step-4:

Next run the following ipynb file-

/content/gdrive/My Drive/zindi_cgiar_wheat_growth_stage_challenge/create_lq2_only_b2_b4_step1_pred.ipynb

Step-5:

Next, run all the ipynb files stored in those following folders-

1. /content/gdrive/My Drive/zindi_cgiar_wheat_growth_stage_challenge/train_lq2_only_effnet_b2_step2/
2. /content/gdrive/My Drive/zindi_cgiar_wheat_growth_stage_challenge/train_lq2_only_effnet_b4_step2/

Step-6:

Finally run the following ipynb file to generate the submission csv-

/content/gdrive/My Drive/zindi_cgiar_wheat_growth_stage_challenge/create_final_submission_csv.ipynb