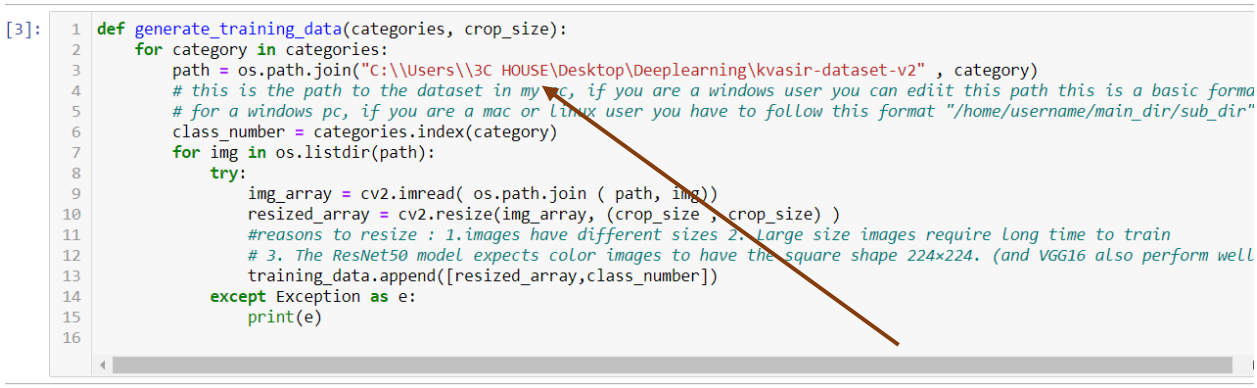
Instructions (Team Neurons)

1. You just need to unzip our code folder and open that folder from Jupyter, there are three Jupyter Notebooks.
2. We used NumPy, TensorFlow, Matplotlib and CV2 python libraries in our project. If you do not install those libraries yet please install libraries in your machine.
3. Then add path to the dataset in the cell that we mentioned.

Run the following funtions below, they will be used

(Add path to the dataset)



```
[3]:
def generate_training_data(categories, crop_size):
    for category in categories:
        path = os.path.join("C:\\Users\\3C HOUSE\Desktop\Deeplearning\kvasir-dataset-v2" , category)
        # this is the path to the dataset in my pc, if you are a windows user you can ediit this path this is a basic forma
        # for a windows pc, if you are a mac or linux user you have to follow this format "/home/username/main_dir/sub_dir"
        class_number = categories.index(category)
        for img in os.listdir(path):
            try:
                img_array = cv2.imread( os.path.join ( path, img))
                resized_array = cv2.resize(img_array, (crop_size , crop_size) )
                #reasons to resize : 1.images have different sizes 2. Large size images require long time to train
                # 3. The ResNet50 model expects color images to have the square shape 224×224. (and VGG16 also perform well
                training_data.append([resized_array,class_number])
            except Exception as e:
                print(e)

```

4. This is the path to the dataset in my pc, if you are a windows user you can edit this path this is a basic format for a windows pc, if you are a mac or Linux user you have to follow this format "/home/username/main_dir/sub_dir".
5. Then you just need to run Jupyter notebook cells.