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| Project Name | AI-powered Nutrition Analyzer forFitnessEnthusiasts |

Apply Image DataGeneratorFunctionalitytoTrainsetAndTestset

LetusapplyImageDataGeneratorfunctionalitytoTrainsetandTestsetbyusing the following code

ForTrainingsetusingflow\_from\_directoryfunction.

This function will return batches of images from the subdirectories 'apples', 'banana','orange', 'pineapple', 'watermelon' together with labels 0 to 4{'apples': 0, 'banana': 1,'orange':2,'pineapple': 3,'watermelon': 4}

Arguments:

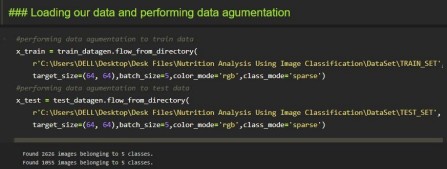
* directory: Directory where the data is located. If labels are "inferred", itshould contain subdirectories, each containing images for a class.

Otherwise,thedirectorystructureisignored.∙batch\_size:Sizeofthebatches of data.Default:32.

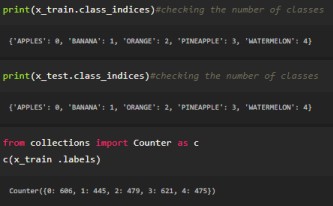
* target\_size:Sizetoresizeimagesaftertheyarereadfromdisk.∙

class\_mode:

* ‘int': means that the labels are encoded as integers (e.g. forsparse\_categorical\_crossentropyloss).
* 'categorical'meansthatthelabelsareencodedasacategoricalvector(e.g.forcategorical\_crossentropy loss).
* 'binary' means that the labels (there can be only 2) are encoded asfloat32 scalars with values 0 or 1 (e.g. for binary\_crossentropy). - None (nolabels).



Wenoticethat2626imagesarebelongingto5classesfortrainingand1055imagesbelongto5classesfortestingpurposes.



Here we are checking the number of classes in train and test data andcountingthenumberofimagesineachclassoftrainsetdatabyusingthe counter function.