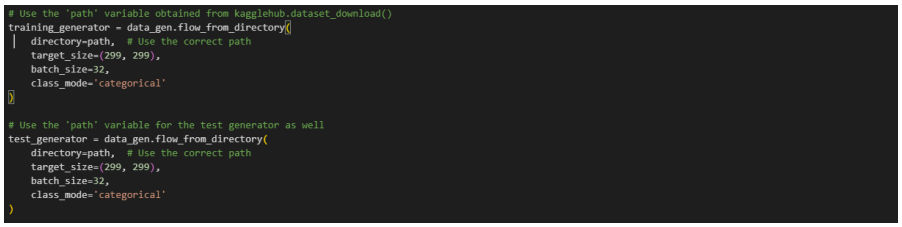
Data Collection and Preprocessing Phase

Date	01 May 2025
Team ID	739942
Project Title	CovidVision: Advanced COVID-19 Detection From Lung X-Rays With Deep Learning Using IBM Cloud
Maximum Marks	6 Marks

Preprocessing Template

The images will be preprocessed by resizing, normalizing, augmenting, denoising, adjusting contrast, detecting edges, converting color space, cropping, batch normalizing, and whitening data. These steps will enhance data quality, promote model generalization, and improve convergence during neural network training, ensuring robust and efficient performance across various computer vision tasks.

Section	**Description**
Data Overview	Overview of the dataset is sourced from **kaggle,** consisting of chest X-ray images to train and evaluate its deep learning model for detecting COVID-19 cases.
Resizing	Images are resized to a target size of **224x224 pixels**
Normalization	Normalize pixel values to a range of **[0,1]** by dividing by 255.
Data Augmentation	Augmentation techniques such as flipping, zooming, and shearing are applied enhance the dataset.

Data Preprocessing Code Screenshots	
Loading Data	
Resizing	
Normalization	
Data Augmentation