## APPLY IMAGE DATA GENERATOR FUNCTIONALITY TO TRAINSET AND TESTSET

| DATE         | 16-NOVEMBER-2022                             |
|--------------|--|
| TEAM ID      | PNT2022TMID49204                             |
| PROJECT NAME | Natural Disasters Intensity Analysis and     |
|              | Classification using Artificial Intelligence |

## Performing data augmentation to train data

```
x train = train datagen.flow from directory('train set', target size = (64,64),
batch size = 5, color mode = 'rgb', class mode = 'categorical')
FileNotFoundError
                                           Traceback (most recent call last)
Input In [11], in ()
---> 1 x train = train datagen.flow from directory('train set', target size
= (64,64), batch size = 5, color mode = 'rgb', class mode = 'categorical')
File ~\anaconda3\envs\tf env\lib\site-
packages\keras\preprocessing\image.py:1650, in
ImageDataGenerator.flow_from directory(self, directory, target size,
color mode, classes, class mode, batch size, shuffle, seed, save to dir,
save prefix, save format, follow links, subset, interpolation,
keep aspect ratio)
   1564 def flow from directory(
  1565
          self,
   1566
            directory,
   (...)
   1580
            keep aspect ratio=False,
   1581):
   1582
            """Takes the path to a directory & generates batches of
augmented data.
   1583
   1584
            Args:
   (...)
   1648
                    and `y` is a numpy array of corresponding labels.
   1649
```

```
-> 1650
            return DirectoryIterator(
   1651
                directory,
   1652
                self,
                target size=target size,
   1653
   1654
                color mode=color mode,
   1655
                keep aspect ratio=keep aspect ratio,
                classes=classes,
   1656
                class mode=class mode,
   1657
                data format=self.data format,
   1658
   1659
                batch size=batch size,
   1660
                shuffle=shuffle,
   1661
                seed=seed.
                save to dir=save to dir,
   1662
   1663
                save prefix=save prefix,
                save format=save format,
   1664
                follow links=follow links,
   1665
                subset=subset,
   1666
                interpolation=interpolation,
   1667
   1668
                dtype=self.dtype,
   1669
File ~\anaconda3\envs\tf env\lib\site-
packages\keras\preprocessing\image.py:563, in
DirectoryIterator.__init__(self, directory, image data generator,
target size, color mode, classes, class mode, batch size, shuffle, seed,
data format, save to dir, save prefix, save format, follow links, subset,
interpolation, keep aspect ratio, dtype)
    561 if not classes:
    562
            classes = []
--> 563
            for subdir in sorted(os.listdir(directory)):
    564
                if os.path.isdir(os.path.join(directory, subdir)):
    565
                    classes.append(subdir)
FileNotFoundError: [WinError 3] The system cannot find the path specified:
'train set'
```

## Performing data augmentation to test data

```
x_test = test_datagen.flow_from_directory('test_set', target_size = (64,64),
batch_size = 5, color_mode = 'rgb', class_mode = 'categorical')
```

Found 198 images belonging to 4 classes.