```
Data Collection
In [3]:
from google.colab import drive
drive.mount('/content/drive')
Mounted at /content/drive
In [4]:
!unzip '/content/drive/MyDrive/ibm/archive.zip'
Archive: /content/drive/MyDrive/ibm/archive.zip
  inflating: Dataset/Dataset/test set/forest/0.48007200 1530881924 final forest.jpg
  inflating: Dataset/Dataset/test_set/forest/0.64133000_1519374442_forest_deep.jpg
  inflating: Dataset/Dataset/test set/forest/0.72918000 1559733279 forests1 gettyimages .
jpg
  \verb|inflating: Dataset/Dataset/test_set/forest/0.98884800 | 1554454572 | \verb|spin.jpg|| \\
 inflating: Dataset/Dataset/test set/forest/01 NeilBurnell Mystical photoverticall.jpg
 inflating: Dataset/Dataset/test_set/forest/091318 LH forest loss main FREE.jpg
 inflating: Dataset/Dataset/test set/forest/1009821.jpg
 inflating: Dataset/Dataset/test set/forest/111188170 river in the mountain forest.jpg
 inflating: Dataset/Dataset/test set/forest/1170x500 Ireland web.jpg
 inflating: Dataset/Dataset/test set/forest/1200px Mountainarea.jpg
 inflating: Dataset/Dataset/test set/forest/146019.jpg
 inflating: Dataset/Dataset/test set/forest/1506697583544.jpg
 inflating: Dataset/Dataset/test set/forest/1551622076 img 5241.jpg
 inflating: Dataset/Dataset/test set/forest/1551903255 2942.jpg
  inflating: Dataset/Dataset/test_set/forest/1556508284pexels_photo_1179229.jpeg
 inflating: Dataset/Dataset/test set/forest/16475617 web1 ForestHealth VIB 190418 2.jpg
```

```
inflating: Dataset/Dataset/test_set/forest/18435324436_6a20e7fc70_k.jpg
   inflating: Dataset/Dataset/test set/forest/1 chimp.jpg
   inflating: Dataset/Dataset/test_set/forest/200px_View_of_Lake_Moraine.jpg
   inflating: Dataset/Dataset/test_set/forest/2017_10_12_09_01_56.jpg
   inflating: Dataset/Dataset/test_set/forest/220px_The_forest_near_Blatets__Vinitsa.JPG
   inflating: Dataset/Dataset/test_set/forest/23769_pcbkrdossw_1500310327.jpg
   inflating: Dataset/Dataset/test set/forest/2E215059 55C7 417B 8DDD693AA6E416B4 source.j
    inflating: Dataset/Dataset/test set/forest/31105585103 4c32392ac1 k.jpg
    inflating: Dataset/Dataset/test set/forest/381417.jpg
   inflating: Dataset/Dataset/test set/forest/4632581118 dcfb9ed978 b.jpg.860x0 q70 crop s
cale.jpg
    inflating: Dataset/Dataset/test_set/forest/4fe3f4e45d6bb93070989b8bbb77d30e.jpg
    inflating: Dataset/Dataset/test_set/forest/4k_timelapse_heavy_rain_on_mountain_forest_t
ree fog motion bad weather condition rfift1zh thumbnail .png
    inflating: Dataset/Dataset/test_set/forest/5325.jpg
    inflating: Dataset/Dataset/test set/forest/5472.jpg
    inflating: Dataset/Dataset/test_set/forest/559672101517195076987621071193712n.jpg
   inflating: Dataset/Dataset/test_set/forest/78closer_exterior_view_of_northern_Rocky_Mou
ntain forest.jpg
   inflating: Dataset/Dataset/test set/forest/79806645 landscape of tall grass field green
mountain forest.jpg
   inflating: Dataset/Dataset/test set/forest/7 18 MedicineBowHikingFishing KL 1319 4003.j
   inflating: Dataset/Dataset/test_set/forest/7ece9530_9cf1 11e9 bf3c 4fe6e6438142.jpg
   inflating: Dataset/Dataset/test set/forest/852554.jpg
   inflating: Dataset/Dataset/test_set/forest/91ErlodmE5L.jpg
   inflating: Dataset/Dataset/test set/forest/91sALlLjdLL.jpg
   inflating: Dataset/Dataset/test set/forest/A003 C014 0724EC.0000000.jpg
   inflating: \verb|Dataset/Dataset/test| set/forest/Adirondack_Habitats_Mixed_Forest_Barnum_Brooinflating| for the property of the
k Trail Paul Smiths VIC 23 May 2012 61.jpg
    inflating: Dataset/Dataset/test_set/forest/Adirondack_Habitats_Mixed_Forest_Jenkins_Mou
ntain Trail Paul Smiths VIC 12 August 2013 71.jpg
    inflating: Dataset/Dataset/test_set/forest/Almaty_Mountains.jpg
    \verb|inflating: Dataset/Dataset/test_set/forest/DSCN8209(1)_250x333.JPG|\\
    inflating: Dataset/Dataset/test set/forest/DSC 0072 Forest.jpg
    inflating. Datacet/Datacet/tect cet/forcet/Daciduous forcet ing
```

```
THITTACTING. DACASEC/ DACASEC/ CESC_SEC/ TOTESC/ DECTUAOUS_TOTESC.JP9
  inflating: Dataset/Dataset/test set/forest/Dupont Forest Triple Falls Rob Travis 2 1.jp
  inflating: Dataset/Dataset/test set/forest/Fall Trees Alaskan Adventure by John Simeone
.jpg
  inflating: Dataset/Dataset/test set/forest/Fallen e1499694482182.jpg
  inflating: Dataset/Dataset/test set/forest/ 101542074 gettyimages 956391468.jpg
  inflating: Dataset/Dataset/test set/forest/a.jpg
  inflating: Dataset/Dataset/test set/forest/acadia np 622419 High Res.jpg
  inflating: Dataset/Dataset/test set/forest/altai regio pine forest 1550x804.jpg
  inflating: Dataset/Dataset/test set/forest/amazing_green_trees_in_dense_mountain_forest
\verb| _nature_landscape_in_4k_aerial_view_b7oqfwutg_thumbnail_.png|
  inflating: Dataset/Dataset/test_set/forest/aokigaharaforest_1_star.jpg
  inflating: Dataset/Dataset/test set/forest/appalachian mtns forest usda srs.jpg
  inflating: Dataset/Dataset/test_set/forest/austria_mountain_forest_landscape_wallpaper_
1920x1200.jpg
  inflating: Dataset/Dataset/test set/forest/bavarian forest 3385966 1280 1.jpg
  inflating: Dataset/Dataset/test set/forest/beautiful green forest range images picture
photos wallpaper download.jpg
  inflating: Dataset/Dataset/test set/forest/beautiful morning mountain forest scenery fr
ee stock photos picjumbo DSC02176.jpg
  inflating: Dataset/Dataset/test set/forest/beautiful mountain forest wallpaper 1920x120
  inflating: Dataset/Dataset/test set/forest/beech oak forest 560.jpg
  inflating: Dataset/Dataset/test set/forest/britishforest 696483208.jpg
  inflating: Dataset/Dataset/test set/forest/canva waterfalls in the mountain forest MAD
  inflating: Dataset/Dataset/test set/forest/ce8b73d56bd242eb1f2369fe856f1c63 700.jpg
  inflating: Dataset/Dataset/test set/forest/cold daylight environment 1423600 640x427.jp
  inflating: Dataset/Dataset/test_set/forest/easternArc.jpg
  inflating: Dataset/Dataset/test set/forest/em tiger mountain 570x284 nc.jpg
  inflating: Dataset/Dataset/test set/forest/europeslostf.jpg
  inflating: Dataset/Dataset/test_set/forest/fanas_gregorschmucki_2016_28_1_2600x1733.jpg
  inflating: Dataset/Dataset/test_set/forest/fantastic_dark_landscape_of_mountain_forest_
in_clouds_fog_or_mist_picture_id688948674.jpg
  inflating: Dataset/Dataset/test set/forest/fb26e4420f3ae3b12788fffdea0fb132 full.jpg
  inflating: Dataset/Dataset/test_set/forest/file_20180627_112634_8tdgn4.jpg
  inflating: Dataset/Dataset/test_set/with fire/180802_CarrFire_010_large_700x467.jpg
  inflating: Dataset/Dataset/test_set/with fire/19464620_401.jpg
  inflating: Dataset/Dataset/test_set/with fire/599857.jpg
  inflating: Dataset/Dataset/test set/with fire/Bandipur fires 2019.jpg
  inflating: Dataset/Dataset/test_set/with fire/FORESTFIRE (1).jpg
  inflating: Dataset/Dataset/test set/with fire/Fire 2 696x392.jpg
  inflating: Dataset/Dataset/test set/with fire/Forest Fire (3).jpg
  inflating: Dataset/Dataset/test set/with fire/Forest Fire (4).jpg
  inflating: Dataset/Dataset/test set/with fire/Forest fire MNRF esize IMG 6743.jpg
  inflating: Dataset/Dataset/test_set/with fire/GettyImages_482867948.0.jpg
  inflating: Dataset/Dataset/test_set/with fire/GettyImages_862092472_1160x773.jpg
  inflating: Dataset/Dataset/test set/with fire/How to Protect Your Home From Forest Fire
_1024x588.jpg
  inflating: Dataset/Dataset/test set/with fire/RED7 May29 1986.jpg
  inflating: Dataset/Dataset/test set/with fire/The Rim Fire in the Stanislaus National F
orest_near_in_California_began_on_Aug._17__2013_0004.jpg
  inflating: Dataset/Dataset/test_set/with fire/Untitled_design 161 866x487.jpg
  inflating: Dataset/Dataset/test_set/with fire/Uttarakhand_forest_fire.jpeg
  inflating: Dataset/Dataset/test_set/with fire/Washington_DNR_Chiwaukum_WildFires_2014_2
015 WA DNR cropped.jpg
  inflating: Dataset/Dataset/test_set/with fire/Wild_fires.jpg
  inflating: Dataset/Dataset/test_set/with fire/X80IR0GYSsG6RaiLcsXX.jpg
  \verb|inflating: Dataset/Dataset/test_set/with fire/b2683a16be44f230a90f50bb944315e994b43042e| \\
43df798bb4feaf27e0f8bc8.jpg
  inflating: Dataset/Dataset/test set/with fire/climate change forest fire.jpeg
  inflating: Dataset/Dataset/test set/with fire/cumming forest fires.jpg
  inflating: Dataset/Dataset/test set/with fire/deerfire high res edit.jpg
  inflating: Dataset/Dataset/test set/with fire/defense large.jpg
  inflating: Dataset/Dataset/test_set/with fire/f90_fire_1168x657.jpg
  inflating: Dataset/Dataset/test set/with fire/file 20190308 155532 1nvts27.jpg
  inflating: Dataset/Dataset/test_set/with fire/forest_fire 0.jpg
  inflating: Dataset/Dataset/test_set/with fire/forest_fire_2268729 1280.jpg
  inflating: Dataset/Dataset/test set/with fire/forest fire at bandipur tiger reserve 04f
1120 0700 f050dh67da77 ina
```

```
vause soro resolutione concarozaezz. Jpg
  inflating: Dataset/Dataset/test_set/with fire/forestfire.jpg
 inflating: Dataset/Dataset/test_set/with fire/forestfire_kApH__621x414_LiveMint.jpg
  inflating: Dataset/Dataset/test set/with fire/growing risk future wildfires adobestock
199370851.jpeg
  inflating: Dataset/Dataset/test set/with fire/header hypermaritime fire.jpg
 inflating: Dataset/Dataset/test set/with fire/horseshoe bay fire.jpg
  inflating: Dataset/Dataset/test set/with fire/image.jpg
  inflating: Dataset/Dataset/test set/with fire/in forestfire1 (1).jpg
 inflating: Dataset/Dataset/test set/with fire/in forestfires shutter.jpg
 inflating: Dataset/Dataset/test set/with fire/in forestfiress (1).jpg
 inflating: Dataset/Dataset/test set/with fire/korea forest fire 4.jpg
  inflating: Dataset/Dataset/test_set/with fire/louisiana_forest_fire.jpg
  inflating: Dataset/Dataset/test set/with fire/maxresdefault.jpg
  inflating: Dataset/Dataset/test_set/with fire/photo_1555842027_660d9d8df55b.jpg
  inflating: Dataset/Dataset/test set/with fire/ring of fire bailey colorado rocky mounta
in forest wildfire picture id157384116.jpg
  inflating: Dataset/Dataset/test_set/with fire/rsz_1fire_pix_accumulation_640_1_2.jpg
  inflating: Dataset/Dataset/test set/with fire/shutterstock 48032821.jpg
  inflating: Dataset/Dataset/test_set/with fire/shutterstock_710588224.jpg
  inflating: Dataset/Dataset/test_set/with fire/skynews_ashdown_forest_fire_4653702.jpg
 inflating: Dataset/Dataset/test_set/with fire/uttarakhand_forest_fire_750x500.jpg
 inflating: Dataset/Dataset/test set/with fire/wildfire header image 1024x1024.jpg
 inflating: Dataset/Dataset/train set/forest/with fire (1).gif
 inflating: Dataset/Dataset/train_set/forest/with_fire (1).jpeg
 inflating: Dataset/Dataset/train_set/forest/with fire (1).jpg
 inflating: Dataset/Dataset/train set/forest/with fire (1).png
 inflating: Dataset/Dataset/train set/forest/with fire (10).jpeg
 inflating: Dataset/Dataset/train set/forest/with fire (10).jpg
 inflating: Dataset/Dataset/train set/forest/with fire (100).jpg
 inflating: Dataset/Dataset/train_set/forest/with_fire (101).jpg
 inflating: Dataset/Dataset/train set/forest/with fire (102).jpg
 inflating: Dataset/Dataset/train set/forest/with fire (103).jpg
  inflating: Dataset/Dataset/train_set/forest/with_fire (104).jpg
  inflating: Dataset/Dataset/train set/forest/with fire (105).jpg
  inflating: Dataset/Dataset/train set/forest/with fire (106).jpg
  inflating: Dataset/Dataset/train_set/forest/with_fire (107).jpg
 inflating: Dataset/Dataset/train set/forest/with fire (108).jpg
 inflating: Dataset/Dataset/train_set/forest/with_fire (109).jpg
 inflating: Dataset/Dataset/train set/forest/with fire (11).jpg
 inflating: Dataset/Dataset/train set/forest/with fire (110).jpg
 inflating: Dataset/Dataset/train_set/forest/with_fire (111).jpg
 inflating: Dataset/Dataset/train set/forest/with fire (112).jpg
 inflating: Dataset/Dataset/train_set/forest/with fire (113).jpg
 inflating: Dataset/Dataset/train set/forest/with fire (114).jpg
 inflating: Dataset/Dataset/train set/forest/with fire (115).jpg
 inflating: Dataset/Dataset/train set/forest/with fire (116).jpg
 inflating: Dataset/Dataset/train set/forest/with fire (117).jpg
 inflating: Dataset/Dataset/train set/forest/with fire (118).jpg
 inflating: Dataset/Dataset/train_set/forest/with_fire (119).jpg
 inflating: Dataset/Dataset/train set/forest/with fire (12).jpg
  inflating: Dataset/Dataset/train_set/forest/with_fire (120).jpg
  inflating: Dataset/Dataset/train set/forest/with fire (121).jpg
  inflating: Dataset/Dataset/train set/forest/with fire (122).jpg
  inflating: Dataset/Dataset/train_set/forest/with_fire (123).jpg
  inflating: Dataset/Dataset/train set/forest/with fire (124).jpg
 inflating: Dataset/Dataset/train_set/forest/with_fire (125).jpg
 inflating: Dataset/Dataset/train_set/forest/with_fire (126).jpg
 inflating: Dataset/Dataset/train_set/forest/with_fire (127).jpg
 inflating: Dataset/Dataset/train set/forest/with fire (128).jpg
 inflating: Dataset/Dataset/train set/forest/with fire (129).jpg
 inflating: Dataset/Dataset/train_set/forest/with fire (13).jpg
 inflating: Dataset/Dataset/train_set/forest/with fire (130).jpg
 inflating: Dataset/Dataset/train set/forest/with fire (131).jpg
 inflating: Dataset/Dataset/train set/forest/with fire (132).jpg
 inflating: Dataset/Dataset/train set/forest/with fire (133).jpg
 inflating: Dataset/Dataset/train set/forest/with fire (134).jpg
 inflating: Dataset/Dataset/train_set/forest/with_fire (135).jpg
 inflating: Dataset/Dataset/train set/forest/with fire (136).jpg
  inflating: Dataset/Dataset/train_set/forest/with_fire (137).jpg
  inflating: Dataset/Dataset/train_set/forest/with fire (138).jpg
  inflating: Dataset/Dataset/train set/forest/with fire (139).jpg
  inflating. Datacat/Datacat/train cat/foract/with fire (111) ing
```

```
INITIACTING. DACASEC/ DACASEC/ CTAIN SEC/ TOTESC/ WICH TITE (17). JP9
inflating: Dataset/Dataset/train set/forest/with fire (140).jpg
inflating: Dataset/Dataset/train set/forest/with fire (141).jpg
inflating: Dataset/Dataset/train set/forest/with fire (142).jpg
inflating: Dataset/Dataset/train set/forest/with fire (143).jpg
inflating: Dataset/Dataset/train set/forest/with fire (144).jpg
inflating: Dataset/Dataset/train set/forest/with fire (145).jpg
inflating: Dataset/Dataset/train set/forest/with fire (146).jpg
inflating: Dataset/Dataset/train set/forest/with fire (147).JPG
inflating: Dataset/Dataset/train set/forest/with fire (148).jpg
inflating: Dataset/Dataset/train set/forest/with fire (149).jpg
inflating: Dataset/Dataset/train set/forest/with fire (15).jpg
inflating: Dataset/Dataset/train_set/forest/with_fire (150).jpg
inflating: Dataset/Dataset/train set/forest/with fire (151).jpg
inflating: Dataset/Dataset/train set/forest/with fire (152).jpg
inflating: Dataset/Dataset/train set/forest/with fire (153).jpg
inflating: Dataset/Dataset/train set/forest/with fire (154).jpg
inflating: Dataset/Dataset/train set/forest/with fire (155).jpg
inflating: Dataset/Dataset/train set/forest/with fire (156).jpg
inflating: Dataset/Dataset/train_set/forest/with_fire (157).jpg
inflating: Dataset/Dataset/train_set/forest/with_fire (158).jpg
inflating: Dataset/Dataset/train_set/forest/with_fire (159).jpg
inflating: Dataset/Dataset/train set/forest/with fire (16).jpg
inflating: Dataset/Dataset/train set/forest/with fire (160).JPG
inflating: Dataset/Dataset/train_set/forest/with fire (161).jpg
inflating: Dataset/Dataset/train_set/forest/with fire (162).jpg
inflating: Dataset/Dataset/train set/forest/with fire (163).jpg
inflating: Dataset/Dataset/train set/forest/with fire (164).jpg
inflating: Dataset/Dataset/train set/forest/with fire (165).JPG
inflating: Dataset/Dataset/train set/forest/with fire (166).jpg
inflating: Dataset/Dataset/train set/forest/with fire (167).jpg
inflating: Dataset/Dataset/train set/forest/with fire (168).jpg
inflating: Dataset/Dataset/train set/forest/with fire (169).jpg
inflating: Dataset/Dataset/train_set/forest/with_fire (17).jpg
inflating: Dataset/Dataset/train set/forest/with fire (170).jpg
inflating: Dataset/Dataset/train set/forest/with fire (171).jpg
inflating: Dataset/Dataset/train_set/forest/with_fire (172).jpg
inflating: Dataset/Dataset/train set/forest/with fire (173).jpg
inflating: Dataset/Dataset/train_set/forest/with_fire (174).jpg
inflating: Dataset/Dataset/train set/forest/with fire (175).jpg
inflating: Dataset/Dataset/train set/forest/with fire (176).jpg
inflating: Dataset/Dataset/train set/forest/with fire (177).jpg
inflating: Dataset/Dataset/train_set/forest/with_fire (178).jpg
inflating: Dataset/Dataset/train_set/forest/with fire (179).jpg
inflating: Dataset/Dataset/train set/forest/with fire (18).jpg
inflating: Dataset/Dataset/train set/forest/with fire (180).jpg
inflating: Dataset/Dataset/train set/forest/with fire (181).jpg
inflating: Dataset/Dataset/train set/forest/with fire (182).jpg
inflating: Dataset/Dataset/train set/forest/with fire (183).jpg
inflating: Dataset/Dataset/train_set/forest/with_fire (184).jpg
inflating: Dataset/Dataset/train set/forest/with fire (185).jpg
inflating: Dataset/Dataset/train set/forest/with fire (186).jpg
inflating: Dataset/Dataset/train set/forest/with fire (187).jpg
inflating: Dataset/Dataset/train set/forest/with fire (188).jpg
inflating: Dataset/Dataset/train set/forest/with fire (189).jpg
inflating: Dataset/Dataset/train set/forest/with fire (19).jpg
inflating: Dataset/Dataset/train_set/forest/with_fire (190).jpg
inflating: Dataset/Dataset/train_set/forest/with_fire (191).jpg
inflating: Dataset/Dataset/train_set/forest/with_fire (192).jpg
inflating: Dataset/Dataset/train set/forest/with fire (193).jpg
inflating: Dataset/Dataset/train set/forest/with fire (194).jpg
inflating: Dataset/Dataset/train set/forest/with fire (195).jpg
inflating: Dataset/Dataset/train_set/forest/with fire (196).jpg
inflating: Dataset/Dataset/train set/forest/with fire (197).jpg
inflating: Dataset/Dataset/train set/forest/with fire (198).jpg
inflating: Dataset/Dataset/train set/forest/with fire (199).jpg
inflating: Dataset/Dataset/train set/forest/with fire (2).jpeg
inflating: Dataset/Dataset/train_set/forest/with_fire (2).jpg
inflating: Dataset/Dataset/train set/forest/with fire (2).png
inflating: Dataset/Dataset/train_set/forest/with_fire (20).jpg
inflating: Dataset/Dataset/train_set/forest/with_fire (200).jpg
inflating: Dataset/Dataset/train set/forest/with fire (201).jpg
inflating. Natacat/Natacat/train cat/foract/with fire (2012) inc
```

```
INITIACTING. PACASEC/PACASEC/CLAIN SEC/IVIESC/WICH TITE (202).JPG
inflating: Dataset/Dataset/train set/forest/with fire (203).jpg
inflating: Dataset/Dataset/train set/forest/with fire (204).jpg
inflating: Dataset/Dataset/train set/forest/with fire (205).jpg
inflating: Dataset/Dataset/train set/forest/with fire (206).jpg
inflating: Dataset/Dataset/train set/forest/with fire (207).jpg
inflating: Dataset/Dataset/train set/forest/with fire (208).jpg
inflating: Dataset/Dataset/train set/forest/with fire (209).jpg
inflating: Dataset/Dataset/train set/forest/with fire (21).jpg
inflating: Dataset/Dataset/train set/forest/with fire (210).jpg
inflating: Dataset/Dataset/train set/forest/with fire (211).jpg
inflating: Dataset/Dataset/train set/forest/with fire (212).jpg
inflating: Dataset/Dataset/train_set/forest/with_fire (213).jpg
inflating: Dataset/Dataset/train set/forest/with fire (214).jpg
inflating: Dataset/Dataset/train set/forest/with fire (215).jpg
inflating: Dataset/Dataset/train set/forest/with fire (216).jpg
inflating: Dataset/Dataset/train set/forest/with fire (217).jpg
inflating: Dataset/Dataset/train set/forest/with fire (218).jpg
inflating: Dataset/Dataset/train set/forest/with fire (219).jpg
inflating: Dataset/Dataset/train_set/forest/with_fire (22).jpg
inflating: Dataset/Dataset/train_set/forest/with_fire (220).JPG
inflating: Dataset/Dataset/train_set/forest/with_fire (221).jpg
inflating: Dataset/Dataset/train set/forest/with fire (222).jpg
inflating: Dataset/Dataset/train set/forest/with fire (223).jpg
inflating: Dataset/Dataset/train_set/forest/with_fire (224).jpg
inflating: Dataset/Dataset/train set/forest/with fire (225).jpg
inflating: Dataset/Dataset/train set/forest/with fire (226).jpg
inflating: Dataset/Dataset/train set/forest/with fire (227).jpg
inflating: Dataset/Dataset/train set/forest/with fire (228).jpg
inflating: Dataset/Dataset/train set/forest/with fire (229).jpg
inflating: Dataset/Dataset/train set/forest/with fire (23).jpg
inflating: Dataset/Dataset/train set/forest/with fire (230).jpg
inflating: Dataset/Dataset/train set/forest/with fire (231).jpg
inflating: Dataset/Dataset/train_set/forest/with_fire (232).jpg
inflating: Dataset/Dataset/train set/forest/with fire (233).jpg
inflating: Dataset/Dataset/train set/forest/with fire (234).jpg
inflating: Dataset/Dataset/train_set/forest/with_fire (235).jpg
inflating: Dataset/Dataset/train set/forest/with fire (236).jpg
inflating: Dataset/Dataset/train_set/forest/with_fire (237).jpg
inflating: Dataset/Dataset/train set/forest/with fire (238).jpg
inflating: Dataset/Dataset/train set/forest/with fire (239).jpg
inflating: Dataset/Dataset/train set/forest/with fire (24).jpg
inflating: Dataset/Dataset/train set/forest/with fire (240).jpg
inflating: Dataset/Dataset/train set/forest/with fire (241).jpg
inflating: Dataset/Dataset/train set/forest/with fire (242).jpg
inflating: Dataset/Dataset/train set/forest/with fire (243).jpg
inflating: Dataset/Dataset/train set/forest/with fire (244).jpg
inflating: Dataset/Dataset/train set/forest/with fire (245).jpg
inflating: Dataset/Dataset/train set/forest/with fire (246).jpg
inflating: Dataset/Dataset/train_set/forest/with_fire (247).jpg
inflating: Dataset/Dataset/train set/forest/with fire (248).jpg
inflating: Dataset/Dataset/train_set/forest/with_fire (249).jpg
inflating: Dataset/Dataset/train set/forest/with fire (25).jpg
inflating: Dataset/Dataset/train set/forest/with fire (250).jpg
inflating: Dataset/Dataset/train set/forest/with fire (251).jpg
inflating: Dataset/Dataset/train set/forest/with fire (252).jpg
inflating: Dataset/Dataset/train_set/forest/with_fire (253).jpg
inflating: Dataset/Dataset/train_set/forest/with_fire (254).jpg
inflating: Dataset/Dataset/train_set/forest/with_fire (255).jpg
inflating: Dataset/Dataset/train set/forest/with fire (256).jpg
inflating: Dataset/Dataset/train set/forest/with fire (257).jpg
inflating: Dataset/Dataset/train set/forest/with fire (258).jpg
inflating: Dataset/Dataset/train_set/forest/with fire (259).jpg
inflating: Dataset/Dataset/train set/forest/with fire (26).jpg
inflating: Dataset/Dataset/train set/forest/with fire (260).jpg
inflating: Dataset/Dataset/train set/forest/with fire (261).jpg
inflating: Dataset/Dataset/train set/forest/with fire (27).jpg
inflating: Dataset/Dataset/train_set/forest/with_fire (28).jpg
inflating: Dataset/Dataset/train set/forest/with fire (29).jpg
inflating: Dataset/Dataset/train_set/forest/with_fire (3).jpeg
inflating: Dataset/Dataset/train_set/forest/with_fire (3).jpg
inflating: Dataset/Dataset/train set/forest/with fire (3).png
inflating. Natacat/Natacat/train cat/foract/with fire (30) ing
```

```
INITIACTING. DACASEC/ DACASEC/ CTAIN SEC/ TOTESC/ WICH TITE (SU/.)PY
inflating: Dataset/Dataset/train set/forest/with fire (31).jpg
inflating: Dataset/Dataset/train set/forest/with fire (32).jpg
inflating: Dataset/Dataset/train set/forest/with fire (33).jpg
inflating: Dataset/Dataset/train set/forest/with fire (34).jpg
inflating: Dataset/Dataset/train set/forest/with fire (35).jpg
inflating: Dataset/Dataset/train set/forest/with fire (36).jpg
inflating: Dataset/Dataset/train set/forest/with fire (37).jpg
inflating: Dataset/Dataset/train set/forest/with fire (38).jpg
inflating: Dataset/Dataset/train set/forest/with fire (39).jpg
inflating: Dataset/Dataset/train set/forest/with fire (4).jpeg
inflating: Dataset/Dataset/train set/forest/with fire (4).jpg
inflating: Dataset/Dataset/train set/forest/with_fire (4).png
inflating: Dataset/Dataset/train set/forest/with fire (40).jpg
inflating: Dataset/Dataset/train set/forest/with fire (41).jpg
inflating: Dataset/Dataset/train set/forest/with fire (42).jpg
inflating: Dataset/Dataset/train set/forest/with fire (43).jpg
inflating: Dataset/Dataset/train set/forest/with fire (44).jpg
inflating: Dataset/Dataset/train set/forest/with fire (45).jpg
inflating: Dataset/Dataset/train_set/forest/with_fire (46).jpg
inflating: Dataset/Dataset/train_set/forest/with_fire (47).jpg
inflating: Dataset/Dataset/train_set/forest/with_fire (48).jpg
inflating: Dataset/Dataset/train set/forest/with fire (49).jpg
inflating: Dataset/Dataset/train set/forest/with fire (5).jpeg
inflating: Dataset/Dataset/train_set/forest/with fire (5).jpg
inflating: Dataset/Dataset/train set/forest/with fire (5).png
inflating: Dataset/Dataset/train set/forest/with fire (50).jpg
inflating: Dataset/Dataset/train set/forest/with fire (51).jpg
inflating: Dataset/Dataset/train set/forest/with fire (52).jpg
inflating: Dataset/Dataset/train set/forest/with fire (53).jpg
inflating: Dataset/Dataset/train set/forest/with fire (54).jpg
inflating: Dataset/Dataset/train set/forest/with fire (55).jpg
inflating: Dataset/Dataset/train set/forest/with fire (56).jpg
inflating: Dataset/Dataset/train_set/forest/with_fire (57).jpg
inflating: Dataset/Dataset/train set/forest/with fire (58).jpg
inflating: Dataset/Dataset/train set/forest/with fire (59).bmp
inflating: Dataset/Dataset/train_set/forest/with_fire (59).jpg
inflating: Dataset/Dataset/train set/forest/with fire (6).jpeg
inflating: Dataset/Dataset/train_set/forest/with_fire (6).jpg
inflating: Dataset/Dataset/train set/forest/with fire (6).png
inflating: Dataset/Dataset/train set/forest/with fire (60).jpg
inflating: Dataset/Dataset/train set/forest/with fire (61).jpg
inflating: Dataset/Dataset/train set/forest/with fire (62).jpg
inflating: Dataset/Dataset/train_set/forest/with fire (63).jpg
inflating: Dataset/Dataset/train set/forest/with fire (64).jpg
inflating: Dataset/Dataset/train set/forest/with fire (65).jpg
inflating: Dataset/Dataset/train set/forest/with fire (66).jpg
inflating: Dataset/Dataset/train set/forest/with fire (67).jpg
inflating: Dataset/Dataset/train set/forest/with fire (68).jpg
inflating: Dataset/Dataset/train_set/forest/with_fire (69).jpg
inflating: Dataset/Dataset/train set/forest/with fire (7).jpeg
inflating: Dataset/Dataset/train set/forest/with fire (7).jpg
inflating: Dataset/Dataset/train set/forest/with fire (7).png
inflating: Dataset/Dataset/train set/forest/with fire (70).jpg
inflating: Dataset/Dataset/train set/forest/with fire (71).jpg
inflating: Dataset/Dataset/train set/forest/with fire (72).jpg
inflating: Dataset/Dataset/train_set/forest/with_fire (73).jpg
inflating: Dataset/Dataset/train_set/forest/with_fire (74).jpg
inflating: Dataset/Dataset/train_set/forest/with_fire (75).jpg
inflating: Dataset/Dataset/train set/forest/with fire (76).jpg
inflating: Dataset/Dataset/train set/forest/with fire (77).jpg
inflating: Dataset/Dataset/train set/forest/with fire (78).jpg
inflating: Dataset/Dataset/train set/forest/with fire (79).jpg
inflating: Dataset/Dataset/train set/forest/with fire (8).jpeg
inflating: Dataset/Dataset/train set/forest/with fire (8).jpg
inflating: Dataset/Dataset/train set/forest/with fire (8).png
inflating: Dataset/Dataset/train set/forest/with fire (80).jpg
inflating: Dataset/Dataset/train_set/forest/with_fire (81).jpg
inflating: Dataset/Dataset/train set/forest/with fire (82).jpg
inflating: Dataset/Dataset/train_set/forest/with_fire (83).jpg
inflating: Dataset/Dataset/train_set/forest/with_fire (84).jpg
inflating: Dataset/Dataset/train set/forest/with fire (85).jpg
inflating. Natacat/Natacat/train cat/foract/with fire (86) ing
```

```
INITIACTING. DACASEC/ DACASEC/ CTAIN SEC/ TOTESC/ WICH TITE (00/.)py
inflating: Dataset/Dataset/train set/forest/with fire (87).jpg
inflating: Dataset/Dataset/train set/forest/with fire (88).jpg
inflating: Dataset/Dataset/train set/forest/with fire (89).jpg
inflating: Dataset/Dataset/train set/forest/with fire (9).jpeg
inflating: Dataset/Dataset/train set/forest/with fire (9).jpg
inflating: Dataset/Dataset/train set/forest/with fire (9).png
inflating: Dataset/Dataset/train set/forest/with fire (90).jpg
inflating: Dataset/Dataset/train set/forest/with fire (91).JPG
inflating: Dataset/Dataset/train set/forest/with fire (92).jpg
inflating: Dataset/Dataset/train set/forest/with fire (93).jpg
inflating: Dataset/Dataset/train set/forest/with fire (94).jpg
inflating: Dataset/Dataset/train set/forest/with fire (95).jpg
inflating: Dataset/Dataset/train set/forest/with fire (96).jpg
inflating: Dataset/Dataset/train set/forest/with fire (97).jpg
inflating: Dataset/Dataset/train set/forest/with fire (98).jpg
inflating: Dataset/Dataset/train set/forest/with fire (99).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (1).png
inflating: Dataset/Dataset/train set/with fire/with fire (10).jpg
inflating: Dataset/Dataset/train_set/with fire/with fire (100).jpg
inflating: Dataset/Dataset/train_set/with fire/with fire (101).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (102).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (103).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (104).jpg
inflating: Dataset/Dataset/train_set/with fire/with fire (105).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (106).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (107).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (108).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (109).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (11).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (110).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (111).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (112).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (113).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (114).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (115).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (116).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (117).jpg
inflating: Dataset/Dataset/train_set/with fire/with fire (118).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (119).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (12).jpg
inflating: Dataset/Dataset/train_set/with fire/with fire (120).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (121).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (122).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (123).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (124).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (125).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (126).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (127).jpg
inflating: Dataset/Dataset/train_set/with fire/with fire (128).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (129).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (13).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (130).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (131).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (132).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (133).jpg
inflating: Dataset/Dataset/train_set/with fire/with fire (134).jpg
inflating: Dataset/Dataset/train_set/with fire/with fire (135).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (136).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (137).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (138).jpg
inflating: Dataset/Dataset/train_set/with fire/with fire (139).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (14).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (140).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (141).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (142).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (143).jpg
inflating: Dataset/Dataset/train_set/with fire/with fire (144).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (145).jpg
inflating: Dataset/Dataset/train_set/with fire/with fire (146).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (147).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (148).jpg
inflating. Datacet/Datacet/train_cet/with fire/with fire (1140) ing
```

```
INITIACTING. DACASEC/DACASEC/CLAIN SEC/WICH IIIE/WICH IIIE (II)/.jpg
inflating: Dataset/Dataset/train set/with fire/with fire (15).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (16).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (17).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (18).jpg
inflating: Dataset/Dataset/train_set/with fire/with fire (19).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (2).jpeg
inflating: Dataset/Dataset/train set/with fire/with fire (2).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (2).png
inflating: Dataset/Dataset/train set/with fire/with fire (20).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (21).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (22).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (23).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (24).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (25).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (26).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (27).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (28).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (29).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (3).jpeg
inflating: Dataset/Dataset/train_set/with fire/with fire (3).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (3).png
inflating: Dataset/Dataset/train set/with fire/with fire (30).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (31).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (32).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (33).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (34).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (35).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (36).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (37).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (38).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (39).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (4).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (4).png
inflating: Dataset/Dataset/train set/with fire/with fire (40).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (41).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (42).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (43).jpg
inflating: Dataset/Dataset/train_set/with fire/with fire (44).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (45).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (46).jpg
inflating: Dataset/Dataset/train_set/with fire/with fire (47).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (48).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (49).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (5).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (50).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (51).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (52).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (53).jpg
inflating: Dataset/Dataset/train_set/with fire/with fire (54).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (55).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (56).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (57).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (58).jpg
inflating: Dataset/Dataset/train_set/with fire/with fire (59).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (6).jpg
inflating: Dataset/Dataset/train_set/with fire/with fire (60).jpg
inflating: Dataset/Dataset/train_set/with fire/with fire (61).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (62).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (63).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (64).jpg
inflating: Dataset/Dataset/train_set/with fire/with fire (65).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (66).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (67).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (68).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (69).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (7).jpg
inflating: Dataset/Dataset/train_set/with fire/with fire (70).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (71).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (72).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (73).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (74).jpg
inflating. Datacet/Datacet/train_cet/with fire/with fire (75) ing
```

```
THITTACTHY. PACASEC/PACASEC/CLATH SEC/WICH TITE/WICH TITE (/J/.)PY
inflating: Dataset/Dataset/train set/with fire/with fire (76).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (77).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (78).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (79).jpg
inflating: Dataset/Dataset/train_set/with fire/with fire (8).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (80).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (81).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (82).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (83).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (84).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (85).jpg
inflating: Dataset/Dataset/train_set/with fire/with fire (86).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (87).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (88).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (89).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (9).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (90).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (91).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (92).jpg
inflating: Dataset/Dataset/train_set/with fire/with fire (93).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (94).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (95).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (96).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (97).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (98).jpg
inflating: Dataset/Dataset/train set/with fire/with fire (99).jpg
inflating: Dataset/Dataset/train set/with fire/with fire.jpeg
inflating: forest1.h5
```

Image Preprocessing

1. Importing The ImageDataGenerator Library

```
In [5]:
```

```
# import keras library
import keras
#import ImageDataGenerator from keras.preprocessing.image
from keras.preprocessing.image import ImageDataGenerator
```

```
In [6]:
```

```
import tensorflow as tf
import numpy as np
import matplotlib.pyplot as plt
from tensorflow import keras
from tensorflow.keras.preprocessing import image_dataset_from_directory
```

1. Define The Parameters /Arguments For ImageDataGenerator Class

```
In [8]:
```

```
In [9]:
```

```
# Preprocessing the Testing Dataset Images
test_datagen = ImageDataGenerator(rescale=1./254)
```

1. Applying ImageDataGenerator Functionality To Trainset And Testset

```
In [10]:
```

Found 436 images belonging to 2 classes.

In [14]:

Found 121 images belonging to 2 classes.