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FutureWarning: Option `--id` was deprecated in version 4.3.1 and will be
removed in 5.0. You don't need to pass it anymore to use a file ID.\n",
            " category=FutureWarning, \n",
            "Downloading...\n",
https://drive.google.com/uc?id=1npY sDIDyQWjm2ZH4cCCuDhZA9liaNUm\n",
            "To: /content/dataset.zip\n",
            "100% 523M/523M [00:02<00:00, 236MB/s]\n"
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ImageDataGenerator(rescale=1./225, shear range=0.2, zoom range=0.2, horizontal
flip=True)"
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train datagen.flow from directory('/content/dataset/train set' ,
target size=(64,64), batch size=5, color mode='rgb', class mode='categorical')
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test datagen.flow from directory('/content/dataset/test set' ,
target size=(64,64),batch size=5,color mode='rgb',class mode='categorical')
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        "from tensorflow.keras.layers import
Convolution2D, MaxPooling2D, Flatten, Dense"
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```

```
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        "model = Sequential()\n",
        "model.add(Convolution2D(32,(3,3),
input shape=(64,64,3),activation='relu'))\n",
        "model.add(MaxPooling2D(pool size=(2,2)))\n",
        "model.add(Convolution2D(32^-,(3,3), activation='relu'))\n",
        "model.add(MaxPooling2D(pool size=(2,2)))\n",
        "model.add(Flatten())\n",
        "model.add(Dense(units =128 , activation='relu'))\n",
        "model.add(Dense(units =4 , activation='softmax'))"
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      "cell type": "code",
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metrics=['accuracy'])"
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      "source": [
        "model.fit generator(generator=x train , steps per epoch=
len(x train),epochs=20,
validation data=x test, validation steps=len(x test))"
      ],
```

```
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packages/ipykernel launcher.py:1: UserWarning: `Model.fit generator` is
deprecated and will be removed in a future version. Please use `Model.fit`,
which supports generators.\n",
        " \"\"Entry point for launching an IPython kernel.\n"
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         loss: 1.2177 - accuracy: 0.4367 - val loss: 1.5993 - val accuracy:
0.4646\n",
         "Epoch 2/20\n",
         loss: 0.9553 - accuracy: 0.5943 - val loss: 0.9020 - val accuracy:
0.6515\n",
         "Epoch 3/20\n",
         "149/149 [============== ] - 28s 186ms/step -
loss: 0.7419 - accuracy: 0.7116 - val loss: 0.7201 - val accuracy:
0.7424\n",
         "Epoch 4/20\n",
         loss: 0.6761 - accuracy: 0.7345 - val loss: 0.7405 - val accuracy:
0.7576\n'',
         "Epoch 5/20\n",
         loss: 0.6356 - accuracy: 0.7480 - val loss: 0.8016 - val accuracy:
0.7424 \n'',
         "Epoch 6/20\n",
         loss: 0.5759 - accuracy: 0.7749 - val loss: 0.9617 - val accuracy:
0.6869\n",
         "Epoch 7/20\n",
         loss: 0.5246 - accuracy: 0.8181 - val loss: 0.7854 - val accuracy:
0.7071\n'',
         "Epoch 8/20\n",
         loss: 0.4662 - accuracy: 0.8248 - val loss: 0.6588 - val accuracy:
0.7273\n",
         "Epoch 9/20\n",
         loss: 0.4304 - accuracy: 0.8302 - val loss: 0.6534 - val accuracy:
0.7727 \n'',
         "Epoch 10/20\n",
```

```
loss: 0.3771 - accuracy: 0.8544 - val loss: 0.8804 - val accuracy:
0.7222 \n'',
         "Epoch 11/20\n",
         loss: 0.3379 - accuracy: 0.8733 - val loss: 0.9850 - val accuracy:
0.7222 \n'',
         "Epoch 12/20\n",
         loss: 0.3635 - accuracy: 0.8464 - val loss: 0.7546 - val accuracy:
0.7727 \n'',
         "Epoch 13/20\n",
         "149/149 [============= ] - 28s 190ms/step -
loss: 0.3426 - accuracy: 0.8733 - val loss: 0.8590 - val accuracy:
0.7222 \n'',
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         loss: 0.2759 - accuracy: 0.8949 - val loss: 0.9976 - val accuracy:
0.7374 n'',
         "Epoch 15/20\n",
         "149/149 [============== ] - 28s 187ms/step -
loss: 0.3028 - accuracy: 0.8854 - val loss: 1.4439 - val accuracy:
0.6313\n",
         "Epoch 16/20\n",
         "149/149 [============== ] - 28s 185ms/step -
loss: 0.2939 - accuracy: 0.8949 - val loss: 0.7897 - val accuracy:
0.7576\n",
         "Epoch 17/20\n",
         loss: 0.2254 - accuracy: 0.9191 - val loss: 1.0229 - val accuracy:
0.7677 n''
         "Epoch 18/20\n",
         loss: 0.2084 - accuracy: 0.9218 - val loss: 1.0623 - val accuracy:
0.7323\n'',
         "Epoch 19/20\n",
         loss: 0.1692 - accuracy: 0.9394 - val loss: 1.0719 - val accuracy:
0.7576\n",
         "Epoch 20/20\n",
         "149/149 [============= ] - 28s 186ms/step -
loss: 0.1843 - accuracy: 0.9340 - val loss: 0.9710 - val accuracy:
0.7525\n"
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```

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        "from tensorflow.keras.preprocessing import image"
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target size=(64,64))\n",
        "x=image.img to array(img)\n",
        "x=np.expand dims(x,axis=0)\n",
        "pred = np.argmax(model.predict(x))\n",
        "print(pred, model.predict(x)) \n",
        "op=['Cyclone','Earthquake','Flood','Wildfire']\n",
        "print(op[pred])"
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           "2 [[0. 0. 1. 0.]]\n",
           "Flood\n"
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target size=(64,64))\n",
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       "x=np.expand dims(x,axis=0)\n",
       "pred = np.argmax(model.predict(x))\n",
       "print(pred, model.predict(x)) \n",
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, target size=(64,64))\n",
        \overline{\ \ \ \ \ \ \ }x=image.img_to_array(img)\n",
        "x=np.expand dims(x,axis=0)\n",
       "pred = np.argmax(model.predict(x))\n",
        "print(pred, model.predict(x))\n",
        "op=['Cyclone','Earthquake','Flood','Wildfire']\n",
        "print(op[pred])"
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```

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           "1 [[0. 1. 0. 0.]]\n",
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       "x=np.expand dims(x,axis=0)\n",
       "pred = np.argmax(model.predict(x))\n",
       "print(pred, model.predict(x)) \n",
       "op=['Cyclone','Earthquake','Flood','Wildfire']\n",
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           "1/1 [========= ] - Os 16ms/step\n",
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           "Cvclone\n"
         ]
       }
     ]
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       "x=np.expand dims(x,axis=0)\n",
        "pred = np.argmax(model.predict(x))\n",
        "print(pred, model.predict(x)) \n",
```

```
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 "print(op[pred])"
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