

{	2
"nbformat": 4,	3
"nbformat_minor": 0,	4
"metadata": {	5
"colab": {	6
"provenance": []	7
},	8
"kernel_spec": {	9
"name": "python3",	10
"display_name": "Python 3"	11
},	12
"language_info": {	13
"name": "python"	14
}	15

```
},
16

"cells": [
17

{
18

"cell_type": "code",
19

"execution_count": 1,
20

"metadata": {
21

"id": "M9TDYjHFMfBL"
22

},
23

"outputs": [],
24

"source": [
25

"import keras\n",
26

"from keras.preprocessing.image import ImageDataGenerator"
27

]
28

},
29
```

```
{  
  
    "cell_type": "code",  
  
    "source": [  
  
        "#Define the parameters/arguments for ImageDataGenerator class\n",  
  
        "train_datagen=ImageDataGenerator(rescale=1./255, shear_range=0.2, rotation_range=180, zoom_range=0.2, horizontal_flip=True)\n",  
  
        "\n",  
  
        "test_datagen=ImageDataGenerator(rescale=1./255)"  
  
    ],  
  
    "metadata": {  
  
        "id": "KEFqxyqwMqMu"  
  
    },  
  
    "execution_count": 2,  
  
    "outputs": []  
  
},
```

```
43
{
44
"cell_type": "code",
45
"source": [
46
"#Applying ImageDataGenerator functionality to trainset\n",
47
"x_train=train_datagen.flow_from_directory('/content/drive/MyDrive/Dataset/Dataset/train_set',target_size=(128,128),batch_
size=32,class_mode='binary')"
48
],
49
"metadata": {
50
"colab": {
51
"base_uri": "https://localhost:8080/"
52
},
53
"id": "D5S4LCT-Mu2L",
54
"outputId": "a4113be0-c0b3-4a95-bf3e-ea77de8b744d"
55
},
56
```

"execution_count": 4,	57
"outputs": [58
{	59
"output_type": "stream",	60
"name": "stdout",	61
"text": [62
"Found 436 images belonging to 2 classes.\n"	63
]	64
}	65
]	66
},	67
{	68
"cell_type": "code",	69
"source": [70

```
"#Applying ImageDataGenerator functionality to testset\n",
```

71

```
"x_test=test_datagen.flow_from_directory('/content/drive/MyDrive/Dataset/Dataset/test_set',target_size=(128,128),batch_size=32,class_mode='binary')"
```

72

```
],
```

73

```
"metadata": {
```

74

```
"colab": {
```

75

```
"base_uri": "https://localhost:8080/"
```

76

```
},
```

77

```
"id": "rQakYllkMxQG",
```

78

```
"outputId": "5d4f7c20-34c2-42ca-e0d8-a8fbfedf01c4"
```

79

```
},
```

80

```
"execution_count": 5,
```

81

```
"outputs": [
```

82

```
{
```

83

```
"output_type": "stream",
```

```
"name": "stdout",
```

```
"text": [
```

```
"Found 121 images belonging to 2 classes.\n"
```

```
]
```

```
}
```

```
]
```

```
}
```

```
]
```

```
}
```

84

85

86

87

88

89

90

91

92