{

"nbformat": 4,

"nbformat\_minor": 0,

"metadata": {

"colab": {

"provenance": []

},

"kernelspec": {

"name": "python3",

"display\_name": "Python 3"

},

"language\_info": {

"name": "python"

}

},

"cells": [

{

"cell\_type": "code",

"execution\_count": null,

"metadata": {

"id": "yhrkzc9ZpmOU"

},

"outputs": [],

"source": [

"from keras.preprocessing.image import ImageDataGenerator\n",

"train\_datagen=ImageDataGenerator(rescale=1./255,shear\_range=0.2,zoom\_range=0.2,horizontal\_flip=True)\n",

"test\_datagen=ImageDataGenerator(rescale=1./255)"

]

},

{

"cell\_type": "code",

"source": [

"x\_train = train\_datagen.flow\_from\_directory('/content/Dataset/training\_set',target\_size=(64,64),batch\_size=300,class\_mode='categorical',color\_mode=\"grayscale\")"

],

"metadata": {

"id": "911jlfgkNnqq",

"colab": {

"base\_uri": "https://localhost:8080/"

},

"outputId": "e8213101-ac86-4abe-e77e-830c0d5379a2"

},

"execution\_count": null,

"outputs": [

{

"output\_type": "stream",

"name": "stdout",

"text": [

"Found 15750 images belonging to 9 classes.\n"

]

}

]

},

{

"cell\_type": "code",

"source": [

"x\_test = test\_datagen.flow\_from\_directory('/content/Dataset/test\_set',target\_size=(64,64),batch\_size=300,class\_mode='categorical',color\_mode=\"grayscale\")"

],

"metadata": {

"colab": {

"base\_uri": "https://localhost:8080/"

},

"id": "0jQeqRgJQ\_k3",

"outputId": "1a92e11e-0f2b-49f8-87d8-eea0fadae84d"

},

"execution\_count": null,

"outputs": [

{

"output\_type": "stream",

"name": "stdout",

"text": [

"Found 2250 images belonging to 9 classes.\n"

]

}

]

},

{

"cell\_type": "code",

"source": [

"from keras.models import Sequential\n",

"from keras.layers import Dense\n",

"from keras.layers import Convolution2D\n",

"from keras.layers import MaxPooling2D\n",

"from keras.layers import Dropout\n",

"from keras.layers import Flatten"

],

"metadata": {

"id": "hENrq9luV5CV"

},

"execution\_count": null,

"outputs": []

},

{

"cell\_type": "code",

"source": [],

"metadata": {

"id": "\_Xog4wM-WHQL"

},

"execution\_count": null,

"outputs": []

}

]

}