```
from keras.models import  Sequential
from keras.layers import Dense , Conv2D , MaxPooling2D, Flatten


model = Sequential()


num_classes = 4


model = Sequential()
model.add(Conv2D(64, (3,3), input_shape=(64,64,3), activation='relu'))
model.add(MaxPooling2D(pool_size=(2,2)))
model.add(Flatten())
model.add(Dense(128, activation='relu'))
model.add(Dense(num_classes, activation='softmax'))
```

```
/usr/local/lib/python3.11/dist-packages/keras/src/layers/convolutional/base_conv.py:107: UserWarning: Do not pass an `input_shape`/`inpu
  super().__init__(activity_regularizer=activity_regularizer, **kwargs)
```

```
model.add(Dense(num_classes, activation='softmax'))



model.summary()
```

Model: "sequential_1"

Layer (type)	Output Shape	Param #
conv2d (Conv2D)	(None, 62, 62, 64)	1,792
max_pooling2d (MaxPooling2D)	(None, 31, 31, 64)	0
flatten (Flatten)	(None, 61504)	0
dense (Dense)	(None, 128)	7,872,640
dense_1 (Dense)	(None, 4)	516
dense_2 (Dense)	(None, 4)	20

Total params: 7,874,968 (30.04 MB)
Trainable params: 7,874,968 (30.04 MB)
Non-trainable params: 0 (0.00 B)

```
from tensorflow.keras.preprocessing.image import ImageDataGenerator
train_datagen = ImageDataGenerator(
    rescale=1./255,
    shear_range=0.2,
    zoom_range=0.2,
    width_shift_range=0.2,
    height_shift_range=0.2,
    fill_mode='nearest',
    vertical_flip=True,
    horizontal_flip=True)
test_datagen = ImageDataGenerator(rescale=1./255)



train_path = '/content/drive/MyDrive/test'
test_path = '/content/drive/MyDrive/test'
aim_path = '/content/drive/MyDrive/task/aim'
train_generator = train_datagen.flow_from_directory(
    train_path,
    target_size=(64,64),
    batch_size=16,
    class_mode='categorical')

test_generator = test_datagen.flow_from_directory(
    test_path,
    target_size=(64,64),
    batch_size=16,
    class_mode='categorical')
```

```
Found 64 images belonging to 2 classes.
Found 64 images belonging to 2 classes.
```

```
train_generator.class_indices
```

```
{'test': 0, 'train': 1}
```

Start coding or generate with AI.