

In [1]:

```
from keras.models import load_model
from keras.preprocessing import image
import numpy as np
```

Using TensorFlow backend.

In [2]:

```
model=load_model("cnn2.h5")
```

WARNING:tensorflow:From C:\ProgramData\Anaconda3\lib\site-packages\keras\backend\tensorflow_backend.py:517: The name tf.placeholder is deprecated. Please use tf.compat.v1.placeholder instead.

WARNING:tensorflow:From C:\ProgramData\Anaconda3\lib\site-packages\keras\backend\tensorflow_backend.py:4138: The name tf.random_uniform is deprecated. Please use tf.random.uniform instead.

WARNING:tensorflow:From C:\ProgramData\Anaconda3\lib\site-packages\keras\backend\tensorflow_backend.py:3976: The name tf.nn.max_pool is deprecated. Please use tf.nn.max_pool2d instead.

WARNING:tensorflow:From C:\ProgramData\Anaconda3\lib\site-packages\keras\backend\tensorflow_backend.py:174: The name tf.get_default_session is deprecated. Please use tf.compat.v1.get_default_session instead.

WARNING:tensorflow:From C:\ProgramData\Anaconda3\lib\site-packages\keras\backend\tensorflow_backend.py:181: The name tf.ConfigProto is deprecated. Please use tf.compat.v1.ConfigProto instead.

WARNING:tensorflow:From C:\ProgramData\Anaconda3\lib\site-packages\keras\backend\tensorflow_backend.py:186: The name tf.Session is deprecated. Please use tf.compat.v1.Session instead.

WARNING:tensorflow:From C:\ProgramData\Anaconda3\lib\site-packages\keras\optimizers.py:790: The name tf.train.Optimizer is deprecated. Please use tf.compat.v1.train.Optimizer instead.

WARNING:tensorflow:From C:\ProgramData\Anaconda3\lib\site-packages\tensorflow\python\ops\math_grad.py:1250: add_dispatch_support.<locals>.wrapper (from tensorflow.python.ops.array_ops) is deprecated and will be removed in a future version.

Instructions for updating:

Use tf.where in 2.0, which has the same broadcast rule as np.where

In [3]:

```
img=image.load_img("acne.jpg",target_size=(64,64))
```

In [4]:

```
x=image.img_to_array(img)
x=np.expand_dims(x,axis=0)
```

In [5]:

```
x.shape
```

Out[5]:

```
(1, 64, 64, 3)
```

In [6]:

```
pred0=model.predict_classes(x)
```

In [8]:

```
pred0
```

Out[8]:

```
array([0], dtype=int64)
```

In [9]:

```
img=image.load_img("mel.jpg",target_size=(64,64))
```

In [10]:

```
x=image.img_to_array(img)  
x=np.expand_dims(x,axis=0)
```

In [11]:

```
x.shape
```

Out[11]:

```
(1, 64, 64, 3)
```

In [12]:

```
pred1=model.predict_classes(x)
```

In [13]:

```
pred1
```

Out[13]:

```
array([1], dtype=int64)
```

In [14]:

```
img=image.load_img("ps.png",target_size=(64,64))
```

In [15]:

```
x=image.img_to_array(img)
x=np.expand_dims(x,axis=0)
```

In [16]:

```
pred2=model.predict_classes(x)
```

In [17]:

```
pred2
```

Out[17]:

```
array([2], dtype=int64)
```

In [18]:

```
img=image.load_img("rw.jpg",target_size=(64,64))
```

In [19]:

```
x=image.img_to_array(img)
x=np.expand_dims(x,axis=0)
```

In [20]:

```
pred3=model.predict_classes(x)
```

In [21]:

```
pred3
```

Out[21]:

```
array([3], dtype=int64)
```

In [26]:

```
img=image.load_img("vit.jpg",target_size=(64,64))
```

In [27]:

```
x=image.img_to_array(img)
x=np.expand_dims(x,axis=0)
```

In [28]:

```
pred4=model.predict_classes(x)
```

In [29]:

```
pred4
```

Out[29]:

```
array([4], dtype=int64)
```

In []: