TEST THE MODEL

In [ ]:
```
!unzip '/content/drive/MyDrive/IBMPROJECT/conversation engine for deaf and dumb.zip'
```

In [1]:
```
from tensorflow.keras.models import load_model
from tensorflow.keras.preprocessing import image
import numpy as np
import cv2
```

In [8]:
```
model = load_model('/content/Real_time.h5')
```

In [9]:
```
img = image.load_img('/content/Dataset/test_set/H/107.png',target_size = (100,100))
img
```

Out[9]:

In[10]:

```
from skimage.transform import resize
def detect(frame):
    img=image.img_to_array(frame)
    img = resize(img,(64,64,1))
    img = np.expand_dims(img,axis=0)
    pred=np.argmax(model.predict(img))
    op=['A','B','C','D','E','F','G','H','I']
    print("THE PREDICTED LETTER IS ",op[pred])
```

In [11]:
```
img=image.load_img("/content/Dataset/test_set/H/107.png")
detect(img)
```

```
1/1 [==============================] - 0s 412ms/step
THE PREDICTED LETTER IS  H
```

In [12]:
```
img = image.load_img('/content/Dataset/test_set/A/110.png')
pred=detect(img)
```

```
1/1 [==============================] - 0s 23ms/step
THE PREDICTED LETTER IS  A
```

In [14]:
```
img=image.load_img('/content/Dataset/test_set/F/108.png')
detect(img)
```

```
1/1 [==============================] - 0s 25ms/step
THE PREDICTED LETTER IS  F
```