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In [2]: import pandas as pd
from sklearn.model_selection import train_test_split
from keras.models import Sequential
from keras.layers import Activation, Dense
```

```
In [21]: import pandas as pd
data = pd.read_csv(r"C:\Users\Mahesh\OneDrive\Pictures\Screenshots\Documents\data.csv")
data.head()
```

```
Out[21]:
```

	age	sex	cp	trestbps	chol	fbs	restecg	thalach	exang	oldpeak	slope	ca	thal	target
0	52	1	0	125	212	0	1	168	0	1.0	2	2	3	
1	53	1	0	140	203	1	0	155	1	3.1	0	0	3	
2	70	1	0	145	174	0	1	125	1	2.6	0	0	3	
3	61	1	0	148	203	0	1	161	0	0.0	2	1	3	
4	62	0	0	138	294	1	1	106	0	1.9	1	3	2	

```
In [23]: x = data.drop(columns=['target'])
y = data['target']
```

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In [24]: x_train, x_test, y_train, y_test = train_test_split(x, y, test_size=0.2, random_state=42)
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In [25]: model = Sequential()
model.add(Dense(32, activation='relu', input_shape=(x_train.shape[1],)))
model.add(Dense(16, activation='relu'))
model.add(Dense(1, activation='sigmoid'))
```

```
In [26]: model.compile(optimizer='adam', loss='binary_crossentropy', metrics=['accuracy'])
model.fit(x_train, y_train, epochs=40, batch_size=32, validation_split=0.2)
```

Epoch 1/40

WARNING:tensorflow:From C:\Users\Mahesh\anaconda3\Lib\site-packages\keras\src\utils\tf_utils.py:492: The name tf.ragged.RaggedTensorValue is deprecated. Please use tf.compat.v1.ragged.RaggedTensorValue instead.

WARNING:tensorflow:From C:\Users\Mahesh\anaconda3\Lib\site-packages\keras\src\engine\base_layer_utils.py:384: The name tf.executing_eagerly_outside_functions is deprecated. Please use tf.compat.v1.executing_eagerly_outside_functions instead.

21/21 [=====] - 2s 26ms/step - loss: -627.1625
- accuracy: 0.0000e+00 - val_loss: -2318.4348 - val_accuracy: 0.0000e+00

Epoch 2/40

21/21 [=====] - 0s 9ms/step - loss: -3560.0247
- accuracy: 0.0000e+00 - val_loss: -5213.0601 - val_accuracy: 0.0000e+00

Epoch 3/40

21/21 [=====] - 0s 7ms/step - loss: -6896.5845
- accuracy: 0.0000e+00 - val_loss: -9585.1631 - val_accuracy: 0.0000e+00

Epoch 4/40

21/21 [=====] - 0s 7ms/step - loss: -10000.0000 - val_loss: -10000.0000

```
In [33]: test_loss, test_acc = model.evaluate(x_test, y_test)
         print('Test accuracy:',test_acc)
```

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7/7 [=====] - 0s 3ms/step - loss: -54442888.0000
- accuracy: 0.0000e+00
Test accuracy: 0.0
```

```
In [ ]:
```