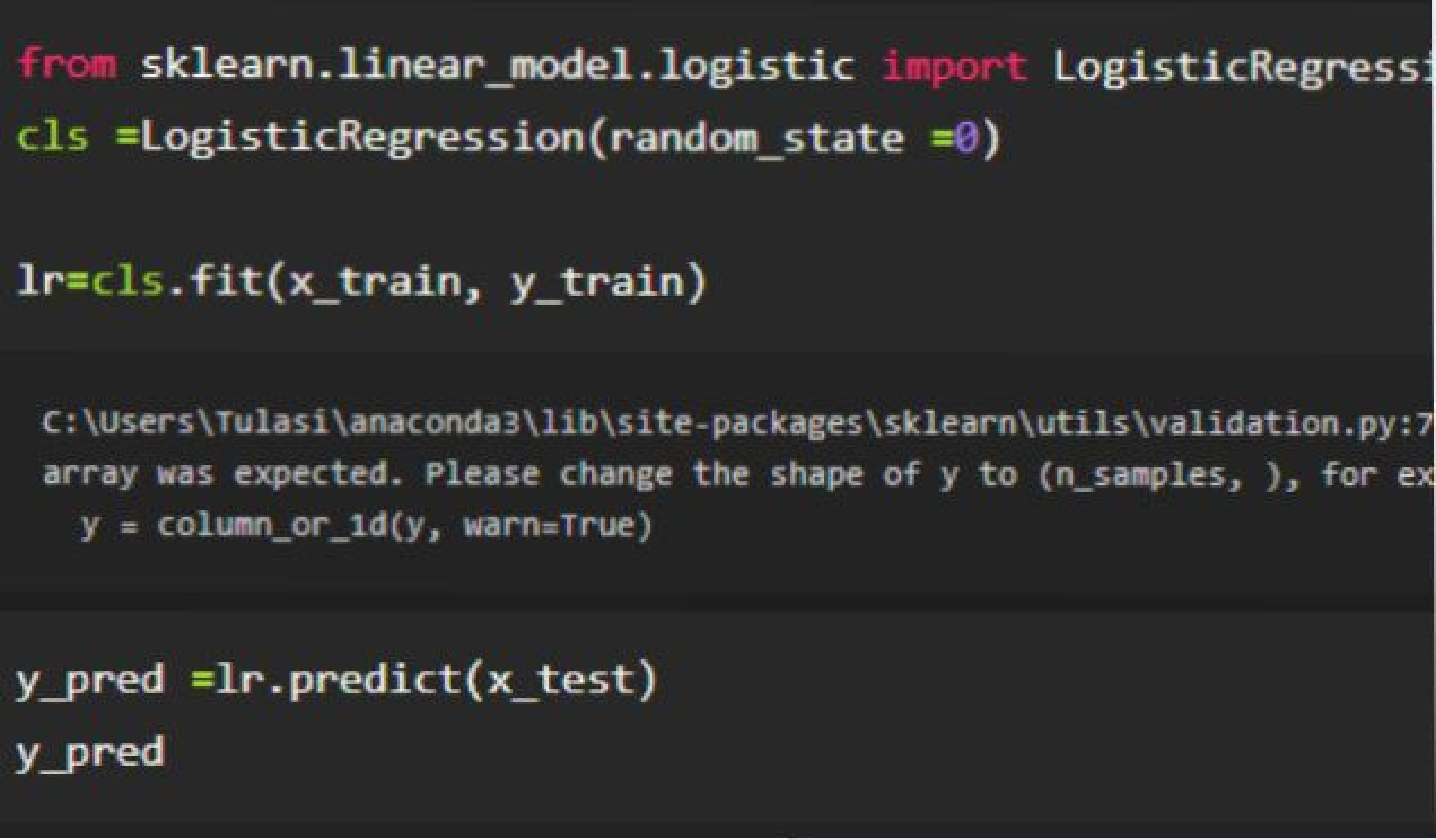
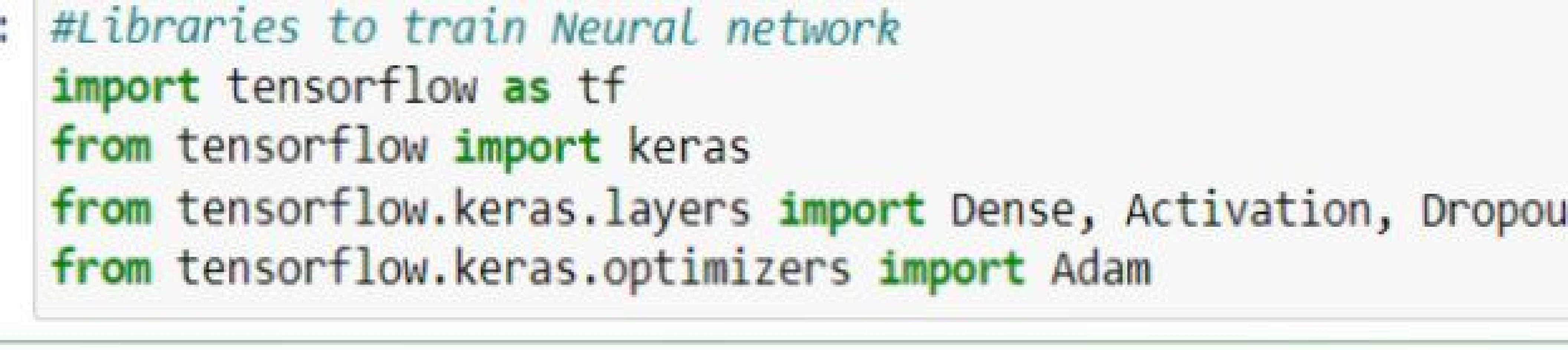


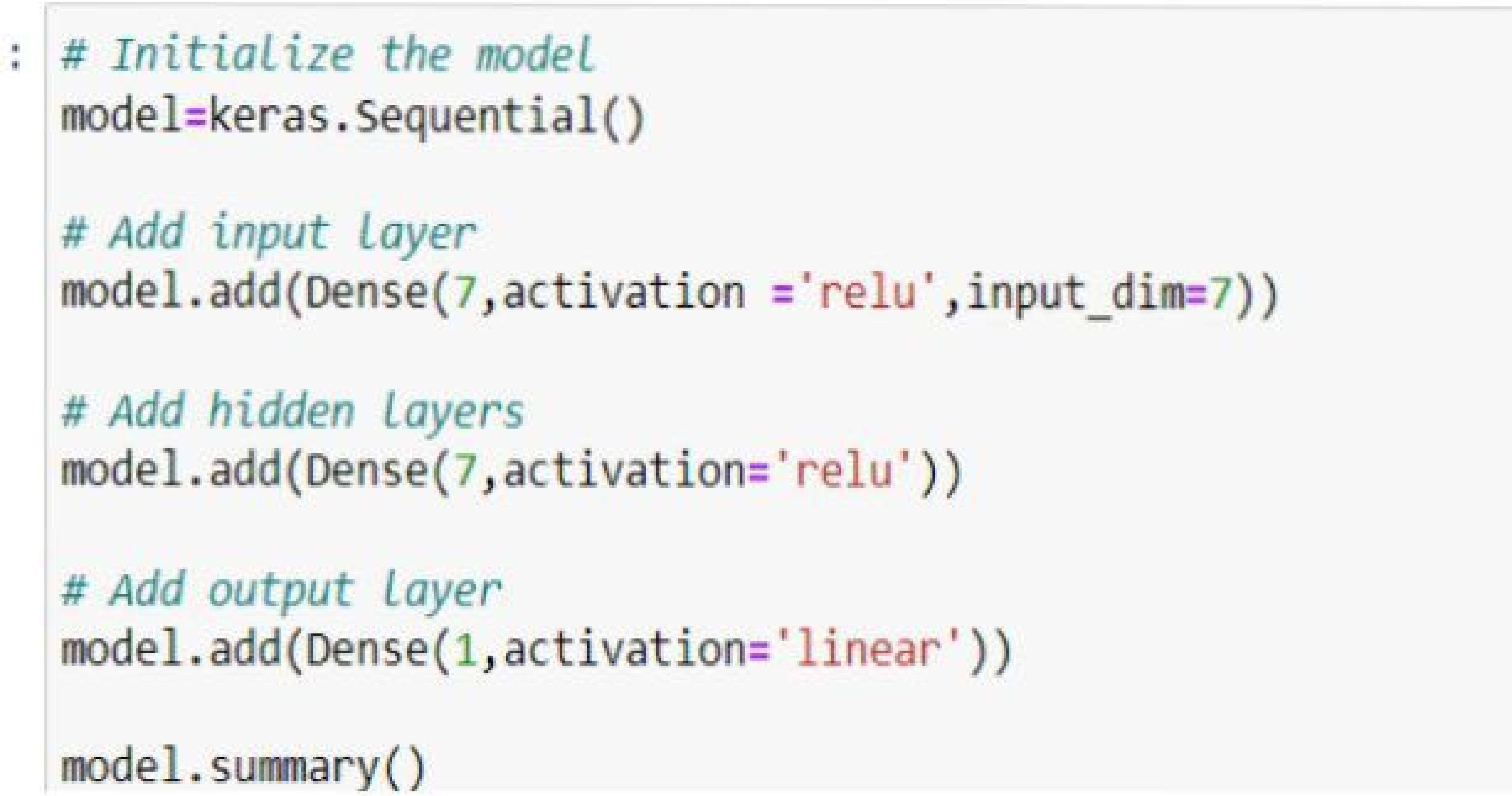
```
from sklearn.linear_model.logistic import LogisticRegressi
cls =LogisticRegression(random_state =0)


lr=cls.fit(x_train, y_train)
```

```
C:\Users\Tulasi\anaconda3\lib\site-packages\sklearn\utils\validation.py:7
array was expected. Please change the shape of y to (n_samples, ), for ex
  y = column_or_1d(y, warn=True)
```

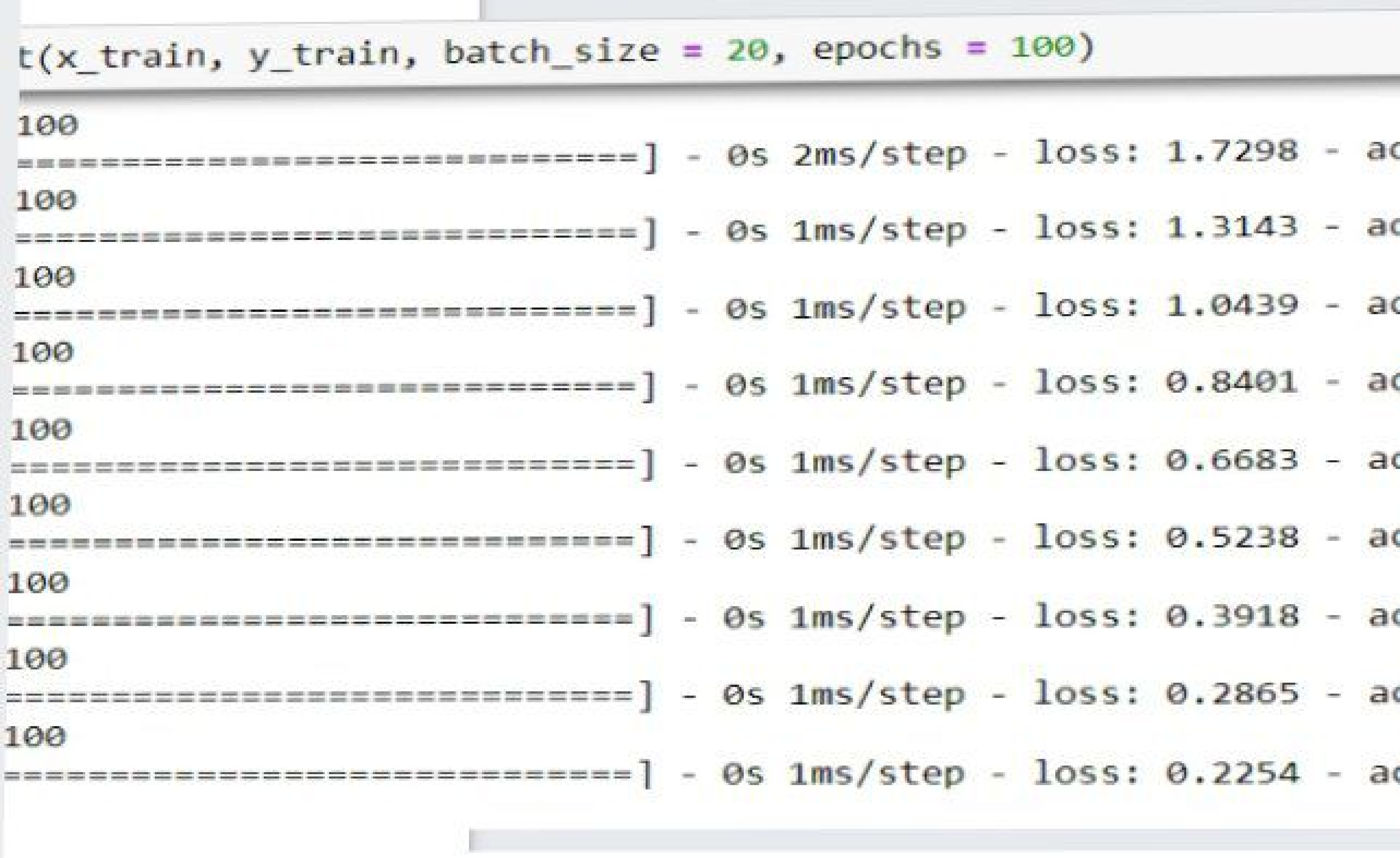
```
y_pred =lr.predict(x_test)
y_pred
```



```
#Libraries to train Neural network
import tensorflow as tf
from tensorflow import keras
from tensorflow.keras.layers import Dense, Activation, Dropou
from tensorflow.keras.optimizers import Adam
```

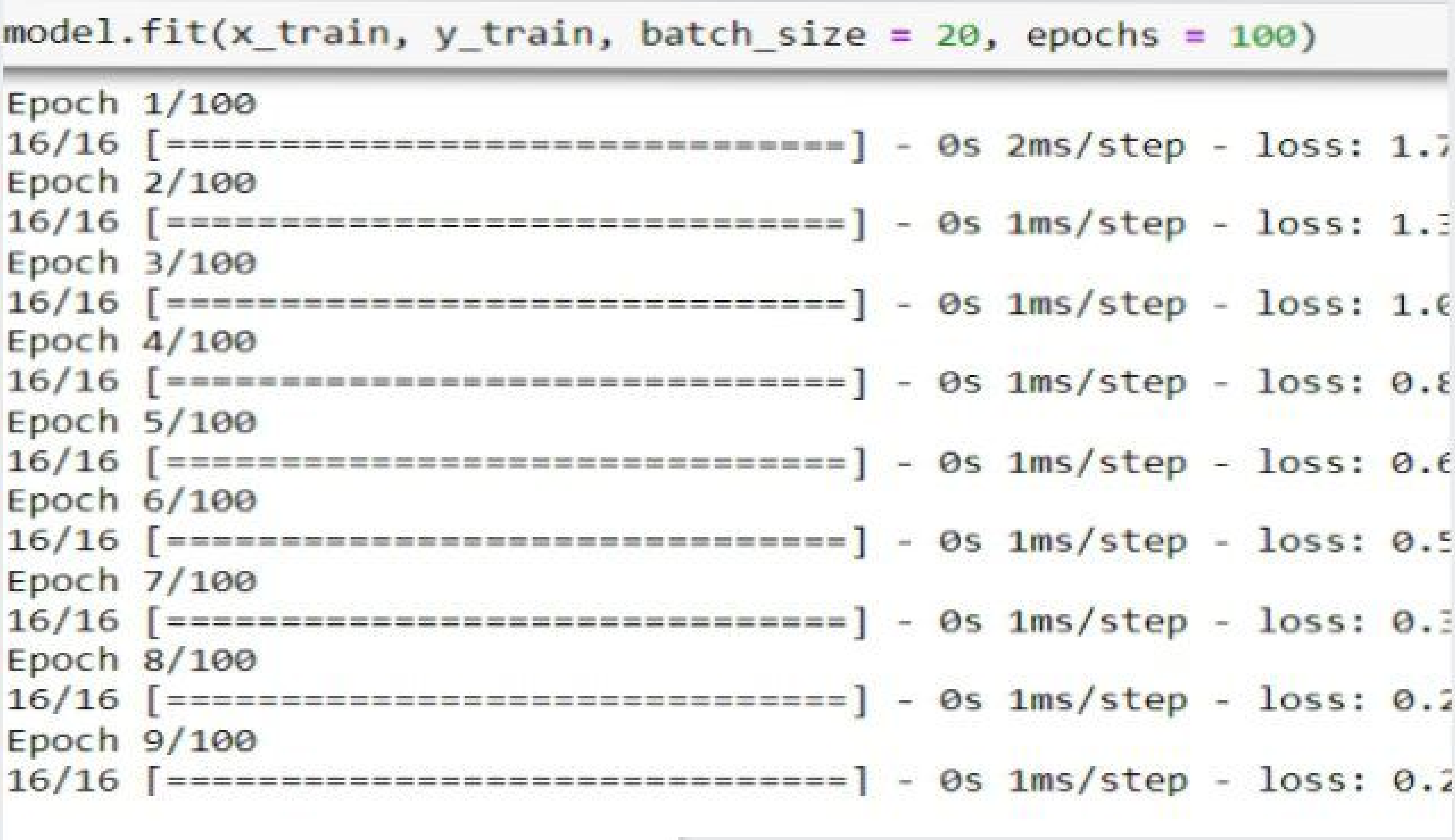


```
# Initialize the model
model=keras.Sequential()

# Add input layer
model.add(Dense(7,activation ='relu',input_dim=7))

# Add hidden layers
model.add(Dense(7,activation='relu'))

# Add output layer
model.add(Dense(1,activation='linear'))

model.summary()
```



```
t(x_train, y_train, batch_size = 20, epochs = 100)
```

```
100
==============================] - 0s 2ms/step - loss: 1.7298 - ac
100
==============================] - 0s 1ms/step - loss: 1.3143 - ac
100
==============================] - 0s 1ms/step - loss: 1.0439 - ac
100
==============================] - 0s 1ms/step - loss: 0.8401 - ac
100
==============================] - 0s 1ms/step - loss: 0.6683 - ac
100
==============================] - 0s 1ms/step - loss: 0.5238 - ac
100
==============================] - 0s 1ms/step - loss: 0.3918 - ac
100
==============================] - 0s 1ms/step - loss: 0.2865 - ac
100
==============================] - 0s 1ms/step - loss: 0.2254 - ac
```



```
model.fit(x_train, y_train, batch_size = 20, epochs = 100)
```

```
Epoch 1/100
16/16 [==============================] - 0s 2ms/step - loss: 1.7
Epoch 2/100
16/16 [==============================] - 0s 1ms/step - loss: 1.3
Epoch 3/100
16/16 [==============================] - 0s 1ms/step - loss: 1.6
Epoch 4/100
16/16 [==============================] - 0s 1ms/step - loss: 0.8
Epoch 5/100
16/16 [==============================] - 0s 1ms/step - loss: 0.6
Epoch 6/100
16/16 [==============================] - 0s 1ms/step - loss: 0.5
Epoch 7/100
16/16 [==============================] - 0s 1ms/step - loss: 0.3
Epoch 8/100
16/16 [==============================] - 0s 1ms/step - loss: 0.2
Epoch 9/100
16/16 [==============================] - 0s 1ms/step - loss: 0.2
```