

```
1 # first neural network with keras tutorial
2 import keras
3 #from numpy import loadtxt
4 from keras.models import Sequential
5 from keras.layers import Dense
6 import pandas as pd
7 df = pd.read_csv("/content/diabetes (1).csv")
8 # split into input (X) and output (y) variables
9 X = df.iloc[:,0:8]
10 y = df.iloc[:,8]

1 # define the keras model
2 model = Sequential()
3 model.add(Dense(12, input_dim=8, activation='relu'))
4 model.add(Dense(8, activation='relu'))
5 model.add(Dense(1,activation='sigmoid'))
6 # compile the keras model and specify the training parameters of the architecture
7 model.compile(loss='binary_crossentropy', optimizer='adam', metrics=['accuracy'])
8 # fit the keras model on the dataset
9 model.fit(X, y, epochs=150, batch_size=16)

1 accuracy = model.evaluate(X, y)
2

1 print('Accuracy: %.2f',(accuracy*100))

1 model.get_config()

1 print(model)
2 model.summary()
```