```
In [ ]: import tensorflow
    from keras.models import Sequential
    from keras.layers import InputLayer,Dense
    from keras.optimizers import Adam
    import pandas as pd
    from sklearn.model_selection import train_test_split
    from sklearn.metrics import mean_squared_error
    import numpy as np

In [ ]: data=pd.read_csv("D:\\Workshops\\W 17 - AI Masterclass Workshop\\data\\Housing
    Price.CSV")
    data.head()

In [ ]: x=data.iloc[:,:5].values
    y=data.iloc[:,5].values
In [ ]: x_train,x_test,y_train,y_test=train_test_split(x,y,test_size=0.2,random_state=
    0)
```

#### **Model structure**

```
In [ ]: model=Sequential()
    model.add(InputLayer(input_shape=(5,)))
    model.add(Dense(units=3, activation="relu"))
    model.add(Dense(units=2, activation="relu"))
    model.add(Dense(units=1, activation="linear"))
In [ ]: model.summary()
```

#### **Optimizers**

```
In [ ]: optim = Adam(lr=0.01)
```

## Compiling the model

```
In [ ]: model.compile(loss="mean_squared_error",optimizer=optim)
```

### Training the model

```
In [ ]: | model_det=model.fit(x_train,y_train,validation_data=(x_test,y_test),epochs=50)
```

# **Evaluating the model**

```
In [ ]: y_pred=model.predict(x_test)
In [ ]: np.sqrt(mean_squared_error(y_test,y_pred))
```