# **Task\_2: Explain what you analyzed in the below code of testing.**

## ****1)Testing of House Price Prediction model based on a lot size****

Firstly, we are collecting data from the Housing.csv file, then we process data by splitting it into training and testing sets, then we train the model (linear regression) and fit it, and finally, we plot a scatter plot with test data and plot the predicted outputs.

A picture containing graphical user interface

Description automatically generated

Graphical user interface, application

Description automatically generated

Now we use assert to test the predicted outputs, if the predicted value is less than or equal to 50000, we consider that the test case is passed.

Testing:

Graphical user interface

Description automatically generated with low confidence

Now, we test by putting boundary constraints, if the lot size is between 1650 and 4425 and the house price should be 25000 and 69000, then test case 1 is considered to be passed, or if the lot size is between 4426 and 10500 the house price should be 69001 and 163000, then test case 2 is considered to be passed.

A picture containing graphical user interface

Description automatically generated

Graphical user interface, text, application

Description automatically generated

## 2)Testing of Image Classification Model using Assert

Below is an example of an image classification model, once the model is trained and output is generated, we test the model.

1. Load Libraries

Graphical user interface, text, application

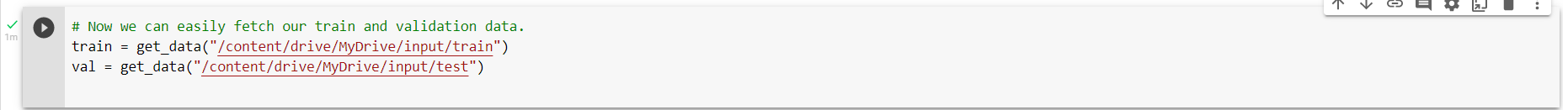
Description automatically generated

1. Load Data based on the labels

Text

Description automatically generated with low confidence

1. Process Data



1. Data Augmentation

A picture containing background pattern

Description automatically generated

Text

Description automatically generated

1. Building the Model

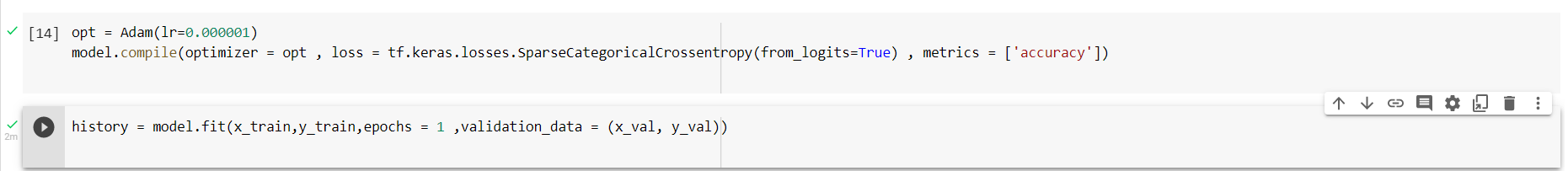
Graphical user interface, text, application, email

Description automatically generated

A picture containing background pattern

Description automatically generated

1. Training the model



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1. Result

Graphical user interface, text, application

Description automatically generated

1. Testing

For testing the model, we compare the predicted values with the true values and if it’s equal, we consider the test case to pass, else we print the predicted value and true value considering that the test has failed.

Graphical user interface

Description automatically generated with low confidence

Shape

Description automatically generated with low confidence

A picture containing graphical user interface

Description automatically generated

Throughout the above tests, we have used the keyword “assert” which allows us to check if a given condition is true and raises an Assertion Error if the condition is false.