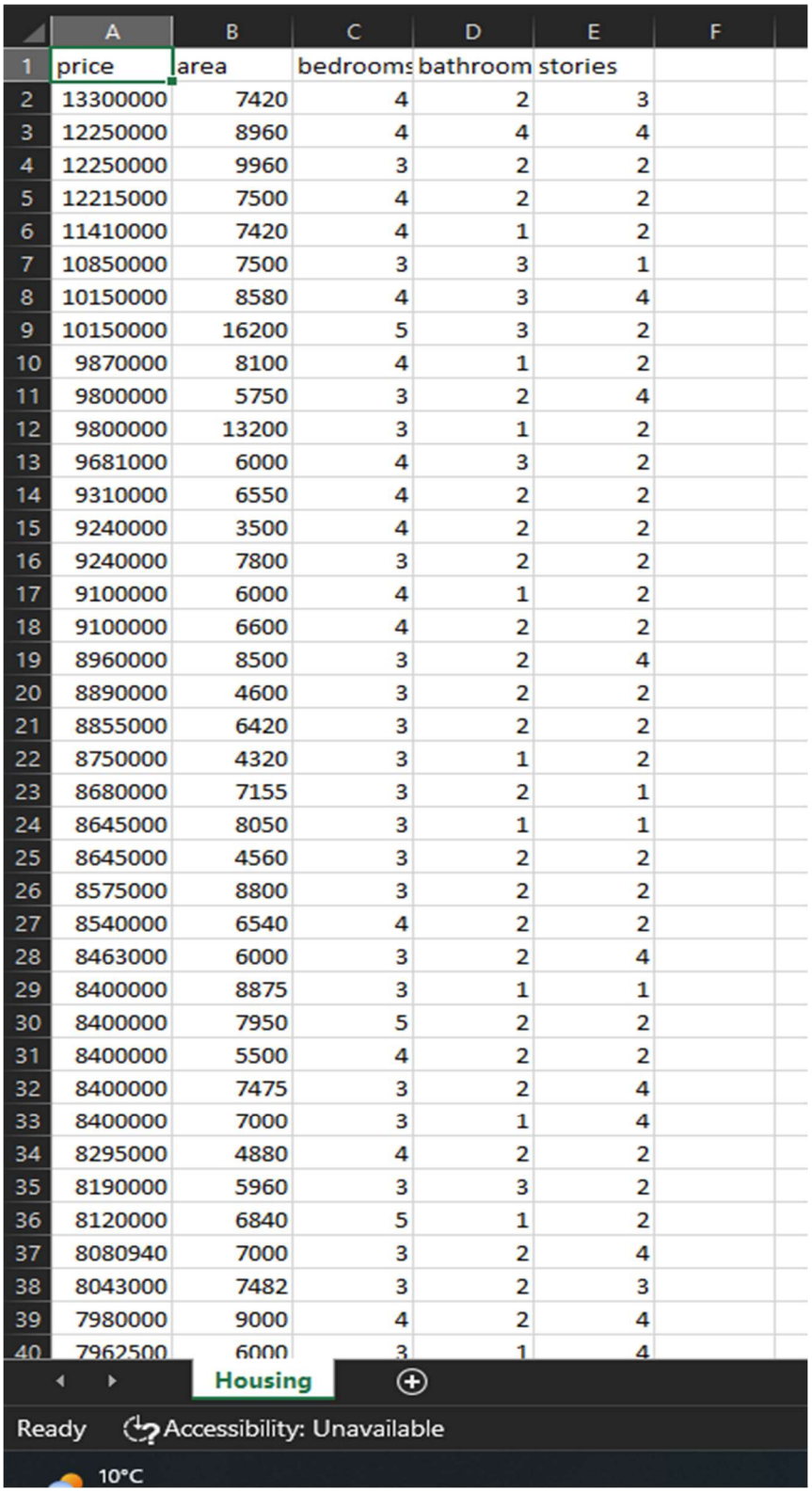
- ## Dataset Selection

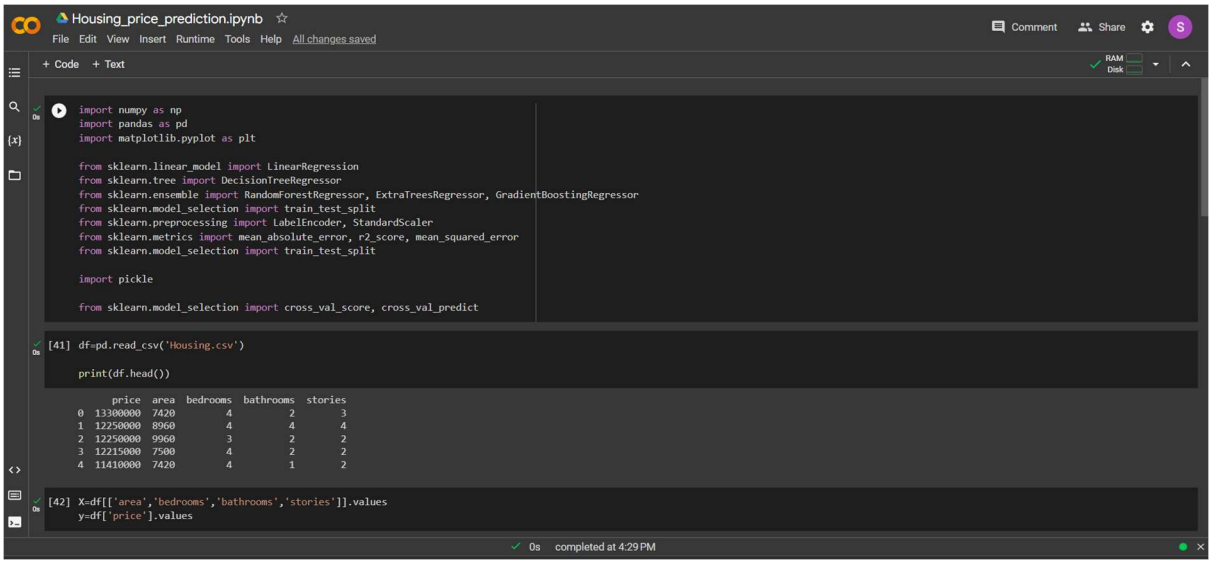
Housing price dataset is selected which contains the columns namely price, area bedrooms, bathrooms and stories. Taking the price value as the output and all other as input a simple linear regression model is created.

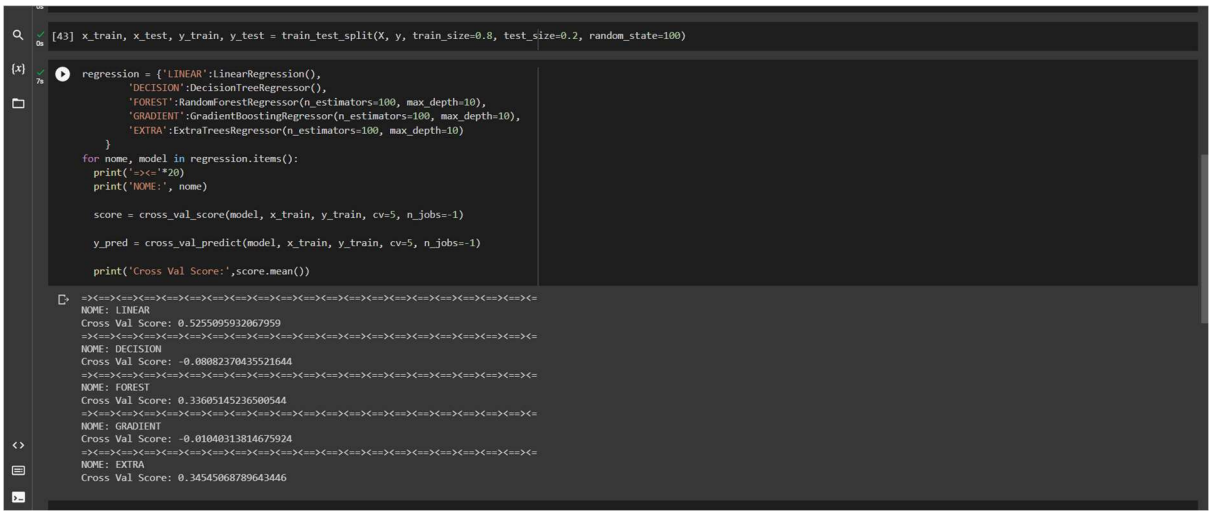


	A	B	C	D	E	F
1	price	area	bedrooms	bathroom	stories	
2	13300000	7420	4	2	3	
3	12250000	8960	4	4	4	
4	12250000	9960	3	2	2	
5	12215000	7500	4	2	2	
6	11410000	7420	4	1	2	
7	10850000	7500	3	3	1	
8	10150000	8580	4	3	4	
9	10150000	16200	5	3	2	
10	9870000	8100	4	1	2	
11	9800000	5750	3	2	4	
12	9800000	13200	3	1	2	
13	9681000	6000	4	3	2	
14	9310000	6550	4	2	2	
15	9240000	3500	4	2	2	
16	9240000	7800	3	2	2	
17	9100000	6000	4	1	2	
18	9100000	6600	4	2	2	
19	8960000	8500	3	2	4	
20	8890000	4600	3	2	2	
21	8855000	6420	3	2	2	
22	8750000	4320	3	1	2	
23	8680000	7155	3	2	1	
24	8645000	8050	3	1	1	
25	8645000	4560	3	2	2	
26	8575000	8800	3	2	2	
27	8540000	6540	4	2	2	
28	8463000	6000	3	2	4	
29	8400000	8875	3	1	1	
30	8400000	7950	5	2	2	
31	8400000	5500	4	2	2	
32	8400000	7475	3	2	4	
33	8400000	7000	3	1	4	
34	8295000	4880	4	2	2	
35	8190000	5960	3	3	2	
36	8120000	6840	5	1	2	
37	8080940	7000	3	2	4	
38	8043000	7482	3	2	3	
39	7980000	9000	4	2	4	
40	7962500	6000	3	1	4	

- ## Model Selection

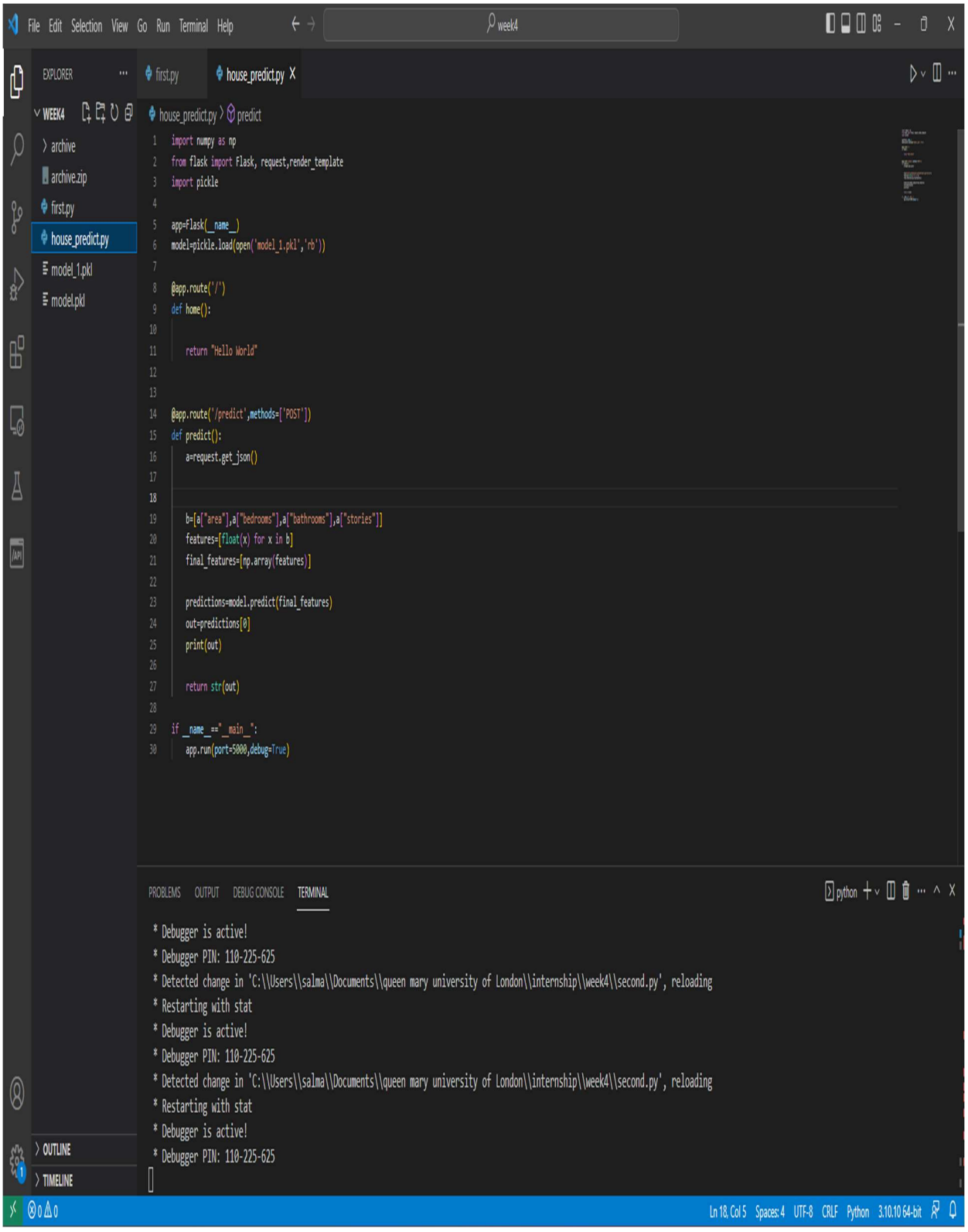
  After trying various regression models such as Linear Regression, Decision Tree Regressor, Random Forest Regressor and Gradient Boosting Regressor based on the cross validation score linear regression model is selected which is then trained on the splitted dataset into training and test. And a pickle file is then generated within the notebook namely model_1.pkl.





- **API Creation**

  Using Flask framework a post api is created which takes values of area, number of bedrooms, number of bathrooms, number of stories in the form of json and then return the predicted price of the house in US Dollars.



- **API Functioning**

  The rest Api is then ran using postman as the method used is post and which directly does not run in browser. To avoid the creation of html form postman is used for convinence. The result is then displayed in the response.