



K. N. Toosi University of Technology

Faculty of Physics
Educational Group of
Atomic-Molecular and Astronomy

Special Topics I Final Projects (Project 11 - House Price)

by
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Overview

In this project, we have prepared the information of about 4000 apartments in Tehran. All data is completely real. Your task is to estimate the price in dollars (or tomans) using the features of the dataset that will be explained below. You can download the dataset needed to answer this question from this [link](#).¹

Columns	Description
Area	House area in meters
Room	Number of bedrooms
Parking	Does it have a parking lot or not?
Warehouse	Does it have a warehouse or not?
Elevator	Does it have a elevator or not?
Address	Address in Tehran
Price	Price in Tomans
Price (USD)	Price in Dollars

Note: The given data is raw. To answer this question, you must first preprocess the data using the pandas package.

Important Points

Be sure to

- Leave appropriate comments for different parts of your code.
- Completely explain about the algorithm(s) you use to answer this question.
- Use **model selection**, **feature engineering** and **feature scaling** in your code.
- Measure your model performance using model evaluation metrics and interpret the obtained result(s).
- If you used a specific book or article in your project, mention it in your notebook.

¹To save the dataset, you need to press Ctrl+S on the opened page and save the .csv file

A part of your score will be allocated to these items.

* You should write all the steps of your project in the **Jupyter notebook** and upload it as a file with the **.ipynb** extension on the vc site.