

(https://archive.ics.uci.edu/ml/datasets/wine+quality)

Project: Automobile - Predict "Price"

Deadline: 2020-07-12 18:00:00

Total marks: 3.0

Your information:

- Fullname:
- · Date of birth:
- Place of birth:
- Email:
- Mobile phone:

In this notebook, we practice all the knowledge and skills that we learned in this course.

We apply the Linear Algorithm to predict: "price of car" by accuracy evaluation methods.

Please read <u>Automobile information (https://archive.ics.uci.edu/ml/datasets/Automobile)</u> carefully before you do this project!

Dataset: imports_85.csv

Attribute Information:

Attribute: Attribute Range

- 1. symboling: -3, -2, -1, 0, 1, 2, 3.
- 2. normalized-losses: continuous from 65 to 256.
- 3. make: alfa-romero, audi, bmw, chevrolet, dodge, honda, isuzu, jaguar, mazda, mercedes-benz, mercury, mitsubishi, nissan, peugot, plymouth, porsche, renault, saab, subaru, toyota, volkswagen, volvo
- 4. fuel-type: diesel, gas.
- 5. aspiration: std, turbo.
- 6. num-of-doors: four, two.
- 7. body-style: hardtop, wagon, sedan, hatchback, convertible.
- 8. drive-wheels: 4wd, fwd, rwd.
- 9. engine-location: front, rear.
- 10. wheel-base: continuous from 86.6 120.9.
- 11. length: continuous from 141.1 to 208.1.
- 12. width: continuous from 60.3 to 72.3.
- 13. height: continuous from 47.8 to 59.8.
- 14. curb-weight: continuous from 1488 to 4066.
- 15. engine-type: dohc, dohcy, I, ohc, ohcf, ohcy, rotor.
- 16. num-of-cylinders: eight, five, four, six, three, twelve, two.
- 17. engine-size: continuous from 61 to 326.
- 18. fuel-system: 1bbl, 2bbl, 4bbl, idi, mfi, mpfi, spdi, spfi.
- 19. bore: continuous from 2.54 to 3.94.
- 20. stroke: continuous from 2.07 to 4.17.
- 21. compression-ratio: continuous from 7 to 23.
- 22. horsepower: continuous from 48 to 288.
- 23. peak-rpm: continuous from 4150 to 6600.
- 24. city-mpg: continuous from 13 to 49.
- 25. highway-mpg: continuous from 16 to 54.
- 26. price: continuous from 5118 to 45400.

Requirements:

- Data exploration
- Data visualization
- Pre-processing: Feature selection/extraction
- · Linear Regression
 - Model Evaluation using Test set
 - Report

In []:	