

Case Study on Multiple Regression

About the Dataset:

You are an auto expert who reviews the latest cars launched around the world in his/her YOUTUBE CHANNEL and based on your inputs people decide which car to buy.

You have data corresponding to 426 cars launched around the world across countries in last 5 years.

Using this dataset create a model which may help you predict the mileage of any new car launched in the market, so that you can give your followers an exact idea whether a newly launched car is fuel efficient or not.





Here's a list of 426 cars from various Car Maker Companies, launched across globe in last 5 years.

Create a Model to predict the MPG (mileage per gallon) of any new car launched in the market by these Car

Makers.

The parameters available corresponding to each car are as follows:

- 1. Maker
- 2. Type
- 3. Origin
- 4. Drivetrain
- 5. Engine Size
- 6. Cylinders
- 7. Horsepower
- 8. Mileage
- 9. Weight
- 10. Wheelbase
- 11. Length

| Make | Model 🔻 | Type ▼ | Origin v | DriveTrain 🔻 | Engine Size | Cylinders ▼ | Horsepowe ▼ | /IPG (Highv ▼ |
|-------|------------------------------|--------|-----------------|--------------|-------------|-------------|-------------|---------------|
| Acura | MDX | SUV | Asia | All | 3.5 | 6 | 265 | 23 |
| Acura | RSX Type S 2dr | Sedan | Asia | Front | 2 | 4 | 200 | 31 |
| Acura | TSX 4dr | Sedan | Asia | Front | 2.4 | 4 | 200 | 29 |
| Acura | TL 4dr | Sedan | Asia | Front | 3.2 | 6 | 270 | 28 |
| Acura | 3.5 RL 4dr | Sedan | Asia | Front | 3.5 | 6 | 225 | 24 |
| Acura | 3.5 RL w/Navigation 4dr | Sedan | Asia | Front | 3.5 | 6 | 225 | 24 |
| Acura | NSX coupe 2dr manual S | Sports | Asia | Rear | 3.2 | 6 | 290 | 24 |
| Audi | A4 1.8T 4dr | Sedan | Europe | Front | 1.8 | 4 | 170 | 31 |
| Audi | A41.8T convertible 2dr | Sedan | Europe | Front | 1.8 | 4 | 170 | 30 |
| Audi | A4 3.0 4dr | Sedan | Europe | Front | 3 | 6 | 220 | 28 |
| Audi | A4 3.0 Quattro 4dr manual | Sedan | Europe | All | 3 | 6 | 220 | 26 |
| Audi | A4 3.0 Quattro 4dr auto | Sedan | Europe | All | 3 | 6 | 220 | 25 |
| Audi | A6 3.0 4dr | Sedan | Europe | Front | 3 | 6 | 220 | 27 |
| Audi | A6 3.0 Quattro 4dr | Sedan | Europe | All | 3 | 6 | 220 | 25 |
| Audi | A4 3.0 convertible 2dr | Sedan | Europe | Front | 3 | 6 | 220 | 27 |
| Audi | 4 3.0 Quattro convertible 2d | Sedan | Europe | All | 3 | 6 | 220 | 25 |
| Audi | A6 2.7 Turbo Quattro 4dr | Sedan | Europe | All | 2.7 | 6 | 250 | 25 |
| Audi | A6 4.2 Quattro 4dr | Sedan | Europe | All | 4.2 | 8 | 300 | 24 |

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