

The dataset describes Tesla's scheduled sales in 2023, as well as the brands and their characteristics.

It contains two tables:

- fact\_sales (**VIN**, brand, payment\_method, sale\_date)
- dim\_brands (**brand**, start\_price, monthly\_inflation\_rate, square\_footage)

**fact\_sales :**

VIN: Vehicle Identification Number of the car that will be sold

brand: brand of the car

payment\_method: mean of payment that will be used for the sale. It's either cash or a loan

sale\_date: the date scheduled for the sale

**dim\_brands :**

brand: the brand offered by Tesla

start\_price: the brand's price in January 2023, before any changes by inflation

monthly\_inflation\_rate: the rate of inflation that increases the price of cars every month

square\_footage: the measurement of the surface taken by the car in ft<sup>2</sup>

## SQL Questions

**Easy** Brand's top payment method

- Find the most used payment method for each brand.

**Medium** New price calculation

- Find the price of each car at the time of sale. Display the two highest prices for each brand.

**Hard** Shipping Strategy

- Tesla delivers cars, whose brands are 'model X' and 'model S', on large 60,000-square-foot ships. Since 'model X' has priority, Tesla ships as many 'model X' cars as possible and then uses the remaining square footage to ship the most number of 'model S' cars. Find the number of 'model X' and 'model S' cars that can be shipped on a 60,000-square-foot ship. Output the brand and the number of cars to be shipped.

## Hints

- 1) The preferable mean of payment of 'model X' is the loan
- 2) The most expensive two 'model X' cars cost: 147483 and 146691
- 3) 'Model S' has 43 cars shipped