Problem description (C_1)

- A common occurrence in retailing is competition between rival establishments over which shop can claim most of the market/customers. The most straightforward price war situation occur in supermarkets (like Indomaret, Alphamart, etc.) or in gas-stations (like Pertamina, Shell, BP, etc.)
- Two gas stations operate from adjacent main road sites and vie with one another for business. Competition is also stiff from other gas stations not far away and profit margins from the sale of gasoline/petrol are very sensitive to sudden changes in demand.

Problem description (C_2)

- On the other hand, the market is very large, and although both gas stations have regular customers, they realize that many of their sales are to 'casual' drivers.
- If one day, one of the gas stations suddenly drops the price per litre as advertised to attract more of the market, ***what would the second gas station do to have a sales strategy so that, in altering the gasoline price, earnings will be as high as possible?***
- It is crucial to be able to predict how the second gas station market share will be affected by the sudden price drop by the first gas station.