Assignment . 1 & 2.

Assignment 2.

- "bayesm" package in R
  - Cheese data set of 'Bordan'
  - 4 columns,
    - (a) Retailer → City, Company.
    - (b) Disp
    - (c) Volume
    - (d) Price

$$Volume = B_0 + B_1 \cdot Price + \varepsilon$$

Current price = $2

Alternate price = $2.37

Unit cost = $1.8 (5% disc.)

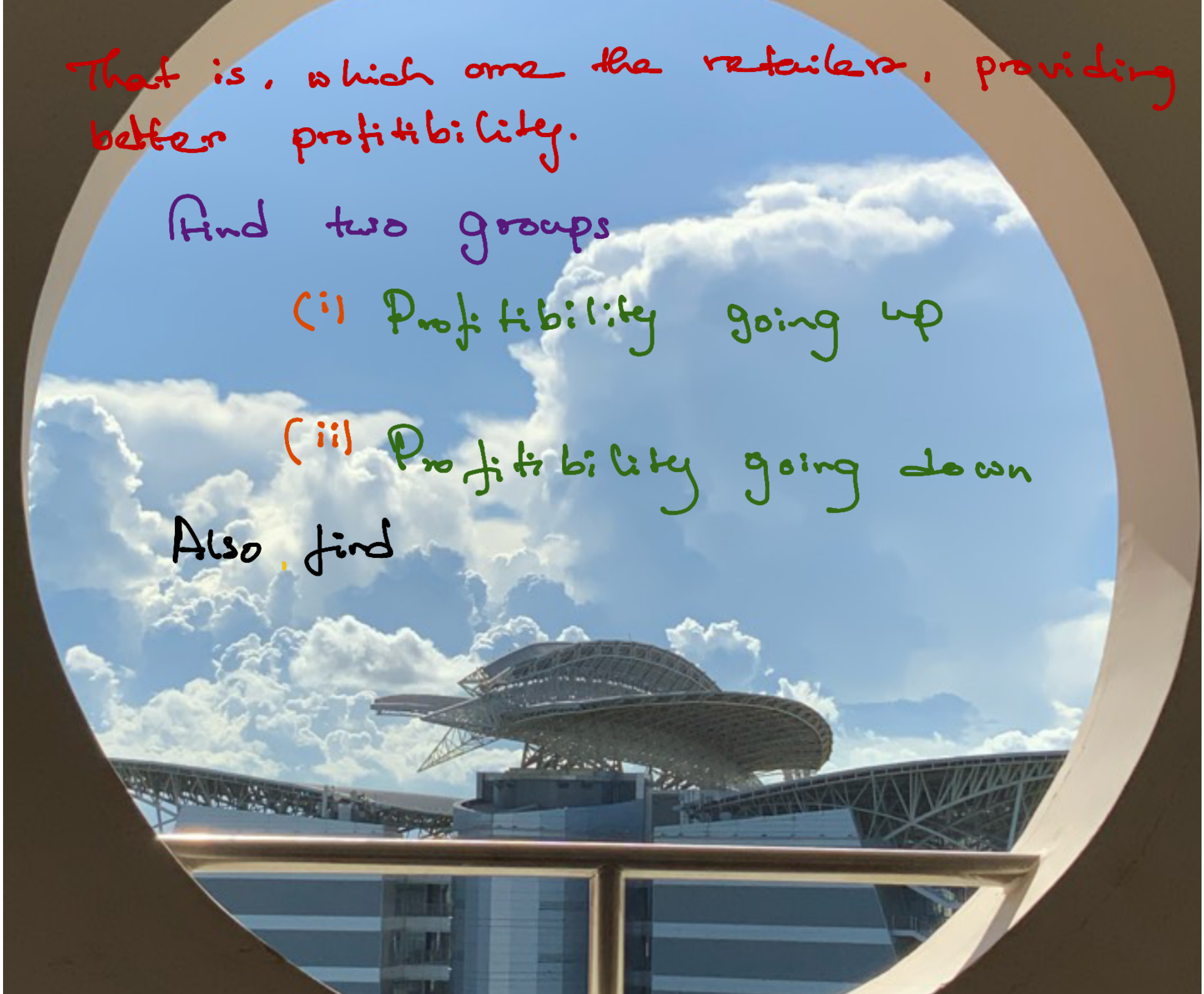
Can not use one model to model whole country. Because there is variance out of location.

Thus build a model,

(i) at city level

* (ii) at company level.

Find the retailers for which after disc profit is increasing.



That is, which one the retailer, providing better profitibility.

Find two groups

(i) Profitibility going up

(ii) Profitibility going down

Also find

(a) For given program (5% disc) which retailers profitability increase / decrease?

(b) What will be the overall profitability for this program

What is profitability?

Revenue = Price * Vol

Cost = Unit cost * vol

Profit = Revenue - Cost

Profitability = Profit at normal cost
- Profit at alternate cost