

# AIST 6410 TP02.III Suggestions

A telephone company offers a 10 percent discount to any customer who phones another person who is also a customer of the company. To be eligible for the discount, the pairing of the two phone numbers must be registered with the telephone company. Furthermore, for billing purposes, the company records both phone numbers, start time, end time, and date of call.

A few thoughts:

- Note that you aren't asked to calculate phone call costs, just provide the means to do it in the data model.
- Assume the base (i.e., non-discounted) charge for a phone call can be determined via a formula from when the call was placed and call's duration (e.g., so much per minute or per call). So storing a call's start DATETIME and end DATETIME will provide the data needed to calculate a call's base charge. If the calling-called phone numbers match a registration's call from-call to phone numbers, then a discount is applied.
- I see three entities: Customer (including a phone number unique among customers), Call (including a call from number, call to number, start and end datetimes), and Registration (including the customer making the registration -- call from -- and the fellow customer being registered -- call to).
- I'd use CHAR(10) for phone numbers (i.e., assume they are ten digit US phone numbers) but this could easily be flexed.