1) **You need to write as many test cases as possible for a simple software program which computes the eligible discount for a customer. Try to describe all possible scenarios in a tabular format. Do not worry about 'login' kind of test cases, and just focus on how you will validate discount calculation. These are the rules.**

If the customer is new, and they are willing to sign up for a new loyalty card, they get a 15% discount on all their purchases on the day. Second if they are an existing customer and hold a loyalty card, they get a 10% discount. Third, if they have a discount coupon, they will get 20% off which cannot be used with the new customer discount but can be used with loyalty card discount. Discount amounts are added, if applicable.

Table for test cases

Serial Number	Test Case	Discount
1	New customer willing to sign up for loyalty card	15%
2	New customer not willing to sign up for loyalty card	0%
3	When user has no discount code but has loyalty card	10%
4	When user has discount coupon and is new customer	20%
5	When user has discount code and has loyalty card	10+20=30%
6	User has discount code if he doesn't have loyalty card	20%

2) **The following appeared as part of an article in the business section of a local newspaper:**

"Ronnie's Auto Repair Shop commenced business four months ago at the location formerly occupied by the Jenny's Beauty Parlour. Ronnie's Auto must be doing well at this location, because it intends to open a big shop in an adjacent town. Jenny's, on the other hand, has seen a lower volume of business in its first year at its new location compared to the prior year at its former location. Jenny's definitely erred in shifting to its new location; its former location is a better site."

Discuss how well reasoned you find this argument. In your discussion be sure to analyse the line of reasoning and the use of evidence in the argument. For example, you may need to consider what questionable assumptions underlie the thinking and what alternative explanations or counterexamples might weaken the conclusion. You can also discuss what sort of evidence would strengthen or refute the argument, what changes in the argument would make it more logically sound, and what, if anything, would help you better evaluate its conclusion.

- For Ronnie's Auto Repair Shop

There could be multiple reasons why they were able to open new shop.

1) Given the fact they're opening a new shop within four months of opening the first one, it's highly plausible they're doing a really good job at maintaining their service and getting their name around by word of mouth or advertising.
2) We can also assume from jenny's beauty parlours' current revenue compared to her older revenue Is the location for the auto repair shop is in a good area as both of them are did a decent business while they were there.
3) Another reason why they can open so soon is that maybe this location was just on a trial basis to figure out whether or not the business was fruitful for them and they had plans to expand from the start but investing so much money initially isn't a very smart idea. And now that they know they're earning decent profits they know for sure it's a good idea so investing a huge amount will most probably turn out to be profitable.
4) Not a very plausible reason but it might be possible they had money lying around in some way and they just wanted to increase their work which will eventually lead to higher profits in future. Not plausible because usually no businesses work this way but it could be a scenario.

- For Jenny's Beauty Parlor

There could be multiple reasons why they saw a lower volume of business in the new location

1) Given the fact they were doing decent business in the last location but here they're seeing a lower volume of business comparatively it is possible because of the location being in the wrong area for business or that place is not in a very center location of that area.
2) As it's a beauty parlor majority of their income comes from the loyal customers who visits them on a regular basis (returning customers) and not the new ones. They could be providing the exact same service on the exact same rates but as it is just the first year of business, they don't have a lot of regular customers just yet which is why their revenue is down currently. As they build up the customer base revenue is probably bound to come back to normal.
3) There is a possibility that the service they provide is not the same anymore. As they shifted the location it's not necessary, they were able to hire the exact same staff they've been training for years and they might have to hire new ones who could be bad at their job or just blatantly rude to the customers which is hindering the process of building new loyal customers.
4) Not a very plausible reason but the new location could be situated in an area where the demographic of people who visits beauty parlors are very less which is why they're not having enough customers.

3) How will you test a wireless mouse? What are the different things you will test and check before you can say that it is a good quality wireless mouse?

There are multiple things to check/inspect in a Wireless mouse

- Appearance and material: We have to check what kind of material is used and whether the material is durable or not when used roughly. Then we have to check for the paint job and make sure its even and according to the design.

- Design: It has to be ergonomically designed in a way that it is comfortable and convenient to use even if someone has to use it for 8+ hours a day and there's no unnecessary pain involved in using it for longer durations.

- Connectivity: If it is connected through a Bluetooth dongle or just Bluetooth, we have to ensure the range of the connection is good enough so that people can use it even if they're sitting a little far from the device they're using it on (for eg if someone is using it on their Smart TV sitting ~10m away). and then ensuring the connection is stable and doesn't break abruptly.

- Battery: Battery should last a good amount of time because charging frequently can be annoying when its something you need every day. Good battery life is 3 months+

- Parts and repairability: The mouse should be repairable to an extent and spare parts should be easily available either to the customer or to the repair executive.

- Sensors: the cursor should move exactly how we move the mouse, if there's any anomaly it should be corrected in production.

- Buttons: The scroll wheel and the left and right buttons should be pressed easily and not jam in whatever conditions.

- Press test: While manufacturing machines should try pressing the buttons and using the scroll wheel a certain amount of time which a general user would use it in the lifetime of the product which is usually 3years+