Vidhi Jaiswal (17BCE10091) QA ASSESSMENT

**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.*

**Answer:** There are 3 different factors:

1. Customer
2. Loyalty card
3. Coupon

According to factor there are 2^3 that is 8 different possibilities, as shown below in table.

|  |  |  |
| --- | --- | --- |
| **Test Case #** | **Test Case Description** | **Test case steps** |
| 1 | Check if customer is new, wants to sign up for loyalty card and has no coupons.  If all conditions are met discount = 15% for first day  Discount = 10% after first day | Check customer status  Check if needs loyalty card  Check coupons  Apply discount |
| 2 | Check if the customer is new, doesn’t want to sign up for loyalty card, and has no coupons  If all conditions are met discount = 0% | Check customer status  Check if needs loyalty card  Check coupons  Apply discount |
| 3 | Check if the customer is new, doesn’t want to sign up for loyalty card, and but has coupon  If all conditions are met discount = 20% | Check customer status  Check if needs loyalty card  Check coupons  Apply discount |
| 4 | Check if the customer is new, wants to sign up for loyalty card, and also has coupons  If all conditions are met discount = 20% | Check customer status  Check if need loyalty card  Check coupons  Apply discount |
| 5 | Check if the existing customer, without loyalty card, and has coupons  If all conditions are met discount = 20% | Check customer status  Check loyalty card status  Check coupons  Apply discount |
| 6 | Check if the existing customer, without loyalty card, and has no coupons  If all conditions are met discount = 0% | Check customer status  Check loyalty card status  Check coupons  Apply discount |
| 7 | Check if the existing customer, with loyalty card, and has coupons  If all conditions are met discount = 30% | Check customer status  Check loyalty card status  Check coupons  Apply discount |
| 8 | Check if the existing customer, with loyalty card, and has no coupons  If all conditions are met discount = 15% | Check customer status  Check loyalty card status  Check coupons  Apply discount |

|  |  |
| --- | --- |
| Discount | Type of Customer |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | New customers, Sign up for loyalty card, No coupon | New Customer,  No sign up for loyalty card,  No coupon | New customers,  No sign up for loyalty card,  With coupon | New customers,  Sign up for loyalty card,  With coupon | Existing customers without loyalty card and with Coupon | Existing customers without loyalty card and no coupon | Existing customers with loyalty card and coupon | Existing customers with loyalty card and no coupon |
| 15% | X  (For first day) |  |  |  |  |  |  |  |
| 10% | X  (After first day) |  |  | X |  |  |  | X |
| 20% |  |  | X | X | X |  |  |  |
| 30% |  |  |  |  |  |  | X |  |
| No discount |  | X |  |  |  | X |  |  |

**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.

**Answer:** According to me the reasoning used in the section is that the location where Jenny had the parlour, was better for business because the auto company was having a good business after they moved there, and Jenny also had good business when the Parlour was there. I think the only evidence given the business both the shops got at the location, which is not enough. It would have been a better reasoning if there was evidence about what kind of people live around there, and what kind of locality was it. Let’s assume that it was a high-end locality, which explains why people would be able to afford for beauty parlour, and also, they would probably have cars, so the auto shop would have a good business there too. For the second location, the article section says that Jenny did not get good business there and location was the only reason provided. More evidence could be provided to support the claim, like there were previously established beauty parlours there, and people tend to go to the beauticians they trust.

There can be some other good counterexamples to weaken the conclusion, such as the reasoning that Jenny’s Beauty Parlour’s service quality decreased over time because of which they had to leave the first location and move to a cheaper location. This will totally oppose the first reasoning of the location being bad. For the auto shop, there might not be any auto shops in the area before, so the opening of this got them more business; or the auto shop had regular customers, who trusted them due to service and quality, so they kept coming to them along with the people at new location, which made their business good overall.

I think to make the argument more reasonable, it needs more evidences, and those evidences to support the reasoning, instead of providing baseless assumptions. The section shows a slippery slope logical fallacy, first shop had good business at first location, the new shop had good business at that location too, so the location must be good for business, which is not a good reasoning. Along with evidences, it also needs to provide the information about the surroundings, environment, and more fact and figures of the businesses of both shops. These things will be much more concrete proofs to make the conclusion strong or change it altogether.

**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?**

**Answer:** When testing a wireless following are the things, I would check

1. Check if it is an optical mouse because they have better performance.
2. Try using the left and right click buttons, and if they are working correctly.
3. Check if the double click is working fine.
4. Check the delays between click, double click and, right click to make sure I can work fast.
5. Check the scroller and scroll click if its working fine.
6. Check the pressure required for clicking the mouse buttons.
7. Checking the drag and drop functionality and the pressure required to hold the click.
8. Check if the mouse is comfortable in my hand, it is the right size, and has a firm grip.
9. Check what surfaces the mouse works on.
10. Test the range up to which the mouse remains operational.
11. Check the battery requirement of the mouse, either it is rechargeable or requires batteries.
12. Check the on and off button.
13. Check if mouse doesn’t have any metal on the grip, to avoid static shocks.
14. Check if the USB driver is detected by the system, and if the mouse is responding perfectly.