

BLACK BOX SOFTWARE TESTING

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DOMAIN TESTING EXERCISES

For all of the cases below, do the traditional equivalence class and boundary analysis. Follow the Schema (Slides 439-442) up to laying out the analysis in the classical boundary / equivalence class table (the table on Slide 381).

For each question, create one table. Create a new section for each variable and a new lien for each test. There is at least one variable of interest in each case below. It's up to you to identify the variable(s) to analyze. Along with the table, provide one or more pages of notes to explain any aspect of your paper that needs an explanation.

You may work on this in pairs. If both of you are stuck, you may consult with another pair. You may use any reference material. However, each of you must think through, and be able to explain, every entry in your pair's table.

1. Sun Trust Part 1

SunTrust issues Visa credit cards with credit limits in the range of \$400 to \$40000. A customer is not to be approved for credit limits outside this range. A customer can apply for the card using an online application form in which one of the fields requires that the customer type in his/her desired credit limit.

Identify the variables and do the domain analysis on as many of these variables as you think are appropriate. Explain why you restricted your analysis to the variable(s) that you did.

2. Sun Trust Part 2

Continue from Part 1. Suppose that someone gives you one of these cards as a gift card. The way that a gift card works is that when you buy some merchandise, the clerk enters a total amount to be deducted from your card. If the card total hits zero, the card is canceled and cannot be used.

List the ways in which the balance on this card might be changed. In each case, do a domain analysis.

3. Grades

The passing score for any undergraduate course at Florida Tech is 60/100. A student who scores less than 60 receives an 'F' on her transcript.

Identify the variables and do the domain analysis on as many of these variables as you think are appropriate. Explain why you restricted your analysis to the variable(s) that you did.

4. A Password

You are required to enter a password of up to 10 characters. The characters must be lower ASCII, printing characters.

Identify the variables and do the domain analysis on as many of these variables as you think are appropriate. Explain why you restricted your analysis to the variable(s) that you did.

5. Result Variables

A and B and C are unsigned integers. $C = A+B$. Analyze C.

6. Multivariable Inputs

A and B and C are unsigned integers. $C = A+B$. Analyze the pairs (A,B) that yield valid values of C.

7. FoodVan 1

FoodVan delivers groceries to customers who order food over the Net. To decide whether to buy more vans, FV tracks the number of customers who call for a van. A clerk enters the number of calls into a database each day. Based on previous experience, the database is set to challenge (ask, "Are you sure?") any number greater than 400 calls.

Identify the variables and do the domain analysis on as many of these variables as you think are appropriate. Explain why you restricted your analysis to the variable(s) that you did.

8. FoodVan 2

FoodVan schedules drivers one day in advance. To be eligible for an assignment, a driver must have special permission or she must have driven within 30 days of the shift she will be assigned to.

Identify the variables and do the domain analysis on as many of these variables as you think are appropriate. Explain why you restricted your analysis to the variable(s) that you did.