A shipping system routes items by code which as follows

Start with a three letter prefix CHI or DET indicating Chicago or Detroit. These are the only two destinations, these are handled differently by the system.

- 1. Three letters long
- 2. Upper or lower case
- 3. DET
- 4. CHI
- 5. Two letters long
- 6. Four letters long
- 7. Three but not all letters
- 8. Thee letter code other than DET or CHI

The fourth position is either a * or /, they are treated the same. This is to accommodate legacy codes.

- 1. Character is * or /
- 2. Character not * or /

The fifth position is a product category indicated by a letter from ASCII A-T and all processed the same

- 1. {A B ... T, a, b...t} Any letter on the list
- 2. Any letter not on the list

The last three position are either 1, 2 or 3 numeric digits long represent a sales code and all processed the same

- 1. exactly one
- 2. exactly two
- 3. exactly three
- 4. They are digits
- 5. no digits
- 6. four digits
- 7. embedded blanks

8. nondigit

All codes must 6-8 characters long

- 1. 6-8
- 2. Too many
- 3. Too few

If the code is invalid and error should be printed in the log and the code ignore.

The code should not be case sensitive chi = CHI

- 1. Critique the spec.
- 2. Develop a set of equivalence class for test input
 - Listing the valid criteria
- 3. Choose test cases using boundary value analysis.
 - Choose the valid test cases first
 - Break each test case to get an invalid

Test Cases

DET*a879

chi/T7

DE*a879

chic/T7

D3T*a879

DAL*t89

DET\879

DET*a89

DET*a8X9

chi/A

DET*a8789

no input

"The Similarity Principle."

- 1. Make the valid cases as dissimilar as possible
- 2. Make each invalid test case exactly like a valid case but differing in one criteria