Answers

1. If the data is ASCII data, only e) is different as it doesn't actually check that there is a code 1, 2, 3 or 4 – it could be blank and would not fail the check. If the data is binary, it is possible to have more than one code in a field. In that case, a) and c), for example, are different as a) checks that column 55 is code 1 to 4 and the whole column is single whereas c) will only check that 1,2,3,4 have a single answer.

2. You could check each pair of codes like this:

   ```
   dm $test=$q5a/1,$q5b/1,
   if $test/m,list $q5a.$q5b,
   dm $test=$q5a/2,$q5b/2,
   if $test/m,list $q5a.$q5b,
   !!etc. for codes 3 to 8
   !!You also need to check that None of these doesn't appear with a brand
   if $q5a/9.1..8,list $q5a,
   if $q5b/9.1..8,list $q5b,
   ```

   Alternatively, you could use .and. which makes tidier code

   ```
   Dm $test=$q5a.and.$q5b,
   If $test/1..8,list $q5a.$q5b,
   if $q5a/9.1..8,list $q5a,
   if $q5b/9.1..8,list $q5b,
   ```

3. Ck $76/1 = $77/nb,

4. Di items_total=$16-20 + $21-25 + $26-30,
   If $items_total.ne.$11-15,list $11-15.$16-20.$21-25.$26-30.$items_total,