You have been given the following requirement specification for a routine to check amounts, dates and how the two sets of data relate to one another. As a result, it will return a code.

The requirement:

The routine will receive three pairs of "amount" and "date":

- The first pair is the initial amount, and when it occurred;
- The second amount is the adjusted amount and when it occurred
- The third pair is the final amount and when it occurred.

The routine must first ensure that the associated dates do not run backwards; the second date must not be earlier than the first and the third date must not be earlier than the second. If this rule is broken, return with a code of 99, and don't check any further.

The amounts can vary either by increasing or decreasing; they might also not vary at all.

If the amount has increased overall then set the initial value of the code to 01

If the amount has decreased overall then set the initial value of the code to 02

If the amount has stayed the same overall then set initial value of the code to 03

If the amount has ever increased then ***add*** a value of 10 to the code so far.

If the amount has ever decreased ***add*** a value of 20 to the code so far

Return the final value of the code

You can assume that the given amounts will be valid numeric data (but no more than that) and that the dates will be valid dates (but no more than that).

Document the test cases you would design to ensure the routine works according to the requirement, and what your approach and assumptions would be.

If the assumption regarding only valid numeric data and dates were to be used, how would that change your approach?