

Old Watch

For each test case, the first step is to get the input so that the leading and trailing spaces are preserved. It's not possible to do this via functions that use spaces as the delimiter to get values so some input method like [getline](#) or [fgets](#) needs to be used.

Then the number of digits, spaces and other characters need to be identified. Which can be used to trivially check for the dead(only spaces), malfunctioning(other characters found) and broken(gaps between digits) states.

If the state is still valid, the number of digits can be used to determine the state, and the digits should be checked for the valid ranges for the relevant state.

The ranges for each state are given in the statement. So they can be checked by either checking them digit by digit or converting digit sequences to integers by multiplying by powers of 10 and then checking the range.