

Part 1

To be safe, all reports must be ascending or descending with a distance between two adjacent levels between 1 and 3.

```
Parsed reports
                              The two validity checks
                                                                          Safe reports
                                (sorted: true, differ: true),
  (7, 6, 4, 2, 1),
  (1, 2, 7, 8, 9),
                                (sorted: true, differ: false),
  (9, 7, 6, 2, 1),
                                (sorted: true, differ: false),
  (1, 3, 2, 4, 5),
                                (sorted: false, differ: true),
  (8, 6, 4, 4, 1),
                                (sorted: true, differ: false),
  (1, 3, 6, 7, 9),
                                (sorted: true, differ: true),
```

Part 2

The same rules as above still apply, but now one level entry can be removed if it makes the report safe.

```
Validity check for each variant
Damped variants
                                                                               Safe reports
                                (
                                  (
                                                                                 ~
                                    (sorted: true, differ: true),
                                                                                 X
    (7, 6, 4, 2, 1),
    (6, 4, 2, 1),
                                    (sorted: true, differ: true),
    (7, 4, 2, 1),
                                    (sorted: true, differ: true),
                                    (sorted: true, differ: false),
    (7, 6, 2, 1),
                                                                                 ~
                                    (sorted: true, differ: true),
    (7, 6, 4, 1),
    (7, 6, 4, 2),
                                    (sorted: true, differ: true),
  ),
                                  ),
    (1, 2, 7, 8, 9),
                                    (sorted: true, differ: false),
    (2, 7, 8, 9),
                                    (sorted: true, differ: false),
    (1, 7, 8, 9),
                                    (sorted: true, differ: false),
    (1, 2, 8, 9),
                                    (sorted: true, differ: false),
    (1, 2, 7, 9),
                                    (sorted: true, differ: false),
    (1, 2, 7, 8),
                                    (sorted: true, differ: false),
                                  ),
  ),
                                    (sorted: true, differ: false),
    (9, 7, 6, 2, 1),
    (7, 6, 2, 1),
                                    (sorted: true, differ: false),
                                    (sorted: true, differ: false),
    (9, 6, 2, 1),
    (9, 7, 2, 1),
                                    (sorted: true, differ: false),
    (9, 7, 6, 1),
                                    (sorted: true, differ: false),
    (9, 7, 6, 2),
                                    (sorted: true, differ: false),
                                  ),
  ),
    (1, 3, 2, 4, 5),
                                    (sorted: false, differ: true),
                                    (sorted: false, differ: true),
    (3, 2, 4, 5),
                                    (sorted: true, differ: true),
    (1, 2, 4, 5),
                                    (sorted: true, differ: true),
    (1, 3, 4, 5),
    (1, 3, 2, 5),
                                    (sorted: false, differ: true),
                                    (sorted: false, differ: true),
    (1, 3, 2, 4),
  (
    (8, 6, 4, 4, 1),
                                    (sorted: true, differ: false),
                                    (sorted: true, differ: false),
    (6, 4, 4, 1),
    (8, 4, 4, 1),
                                    (sorted: true, differ: false),
                                    (sorted: true, differ: true),
    (8, 6, 4, 1),
    (8, 6, 4, 1),
                                    (sorted: true, differ: true),
    (8, 6, 4, 4),
                                    (sorted: true, differ: false),
  ),
                                  ),
                                    (sorted: true, differ: true),
    (1, 3, 6, 7, 9),
    (3, 6, 7, 9),
                                    (sorted: true, differ: true),
    (1, 6, 7, 9),
                                    (sorted: true, differ: false),
    (1, 3, 7, 9),
                                    (sorted: true, differ: false),
                                    (sorted: true, differ: true),
    (1, 3, 6, 9),
    (1, 3, 6, 7),
                                    (sorted: true, differ: true),
  ),
                                  ),
```

)

 [☐] In total there are 2 safe reports.

 [☐] In total there are 4 safe reports.