



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
( (7, 6, 4, 2, 1), (1, 2, 7, 8, 9), (9, 7, 6, 2, 1), (1, 3, 2, 4, 5), (8, 6, 4, 4, 1), (1, 3, 6, 7, 9), )	↔	( (sorted: true, differ: true), (sorted: true, differ: false), (sorted: true, differ: false), (sorted: false, differ: true), (sorted: true, differ: false), (sorted: true, differ: true), )	↔	( ✓ ✗ ✗ ✗ ✗ ✓ )

↪ In total there are 2 safe reports.

Part 2

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

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

↪ In total there are 4 safe reports.