



Bird Watcher

You're an avid bird watcher that keeps track of how many birds have visited your garden in the last seven days.

You have five tasks, all dealing with the numbers of birds that visited your garden.

1. Check what the counts were last week

For comparison purposes, you always keep a copy of last week's counts nearby, which were: 0, 2, 5, 3, 7, 8 and 4. Create a *vector* containing last week's counts.

2. Check how many birds visited today

Implement the *today* function to return how many birds visited your garden today. The bird counts are ordered by day, with the first element being the count of the oldest day, and the last element being today's count.

3. Increment today's count

Implement the *inc-bird* function to increment today's count.

4. Check if there was a day with no visiting birds

Implement the *day-without-birds?* predicate function that returns true if there was a day at which zero birds visited the garden; otherwise, return false.

5. Calculate the number of busy days

Some days are busier than others. A busy day is one where five or more birds have visited your garden. Implement the *busy-days* function to return the number of busy days.