

## Problem Set 4 Exercise #15: Birthdays

**Reference:** Lecture 11 notes

**Learning objective:** An array of structures

**Estimated completion time:** 20 minutes

### Problem statement:

Given a group consisting of  $n$  members, we are to determine if there are at least two members with the same birthday. Each member's birthday is represented as two values, the *month* and the *day*.

Write a program **birthday.c** that reads a list of birthdays as input, and reports if there are at least two occurrences of the same birthday.

You may assume that the group size is between 2 to 25.

Your program should contain at least two functions: **read\_birthdays()** to read all birthdays into an array, and **share\_birthday()** to check if any two birthdays in the given array are the same.

### Sample run #1:

```
How many birthdays to input? 10
Enter 10 birthdays, day followed by month each:
28 11
6 8
13 5
19 3
1 10
21 10
14 11
3 11
6 4
3 11
Group of 10 having same birthday: Yes
```

**Sample run #2:**

```
How many birthdays to input? 5
Enter 5 birthdays, day followed by month each:
25 7
5 1
19 10
14 3
27 12
Group of 5 having same birthday: No
```