Re: Birthday Problem

Source: http://coding.derkeiler.com/Archive/C_CPP/comp.lang.cpp/2004−04/2623.html

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> *This question is impossible to answer without statistics on how many*
> *people in the population were born on each day of the year. It is very*
> *unlikely to be a uniform distribution, which is what everyone else*
> *seems to be assuming (e.g. if everyone in the world was born on 4th*
> *July, the answer would be 1).*

Interesting point ... in fact, in some areas, like say Minnesota or North Dakota, birthdays tend to be clustered in the months July−Sept.

[ya' gotta find somethin' to do on those long, cold winter nights I guess]

To extend this further, with technological advances in the last n years (say 40 if you like), the "clustering" from the above example has likely started to decrease with time, yielding a more even distribution for people born more recently.

[Now you can drive in your heated automobile on plowed, paved roads to, say, go bowling .. so there are more solutions to the aforementioned "what to do" problem, regardless of the time of year ...]

So, you would really have to know quite a lot of details about the people in the room (is it a geratrics convention in Alberta, or a child's birthday party in Sao Paolo) in order to get an accurate grasp on the probability problem.

Like some other posters in this thread, I wonder if the point of the problem was really the code, or whether it was intended to help you realize that sometimes the most simply stated problems are the trickiest to solve. If I were the prof., I would give credit based not so much on the code itself, but rather on how well the students thought about the problem ... recognizing the leap−year issue gets one point, the non−even birthday distribution gets two points, etc. After all, a careful analysis of the problem is (at least) 80% of proper program design .. I guess (from context) that your course is on an introductory level, but one can never learn this lesson too early.

I am extremely interested to see the soln. given by your prof. ... if
only to find out how narrowly/broadly the problem was defined in her
mind. In my experience, profs, like wizards, can be quite subtyl ..
and they can even be quick to anger as well 8*).

Good luck!