**7. Graduation**

# Program Name: Graduation.java Input File: graduation.dat

You’ve been given the task to sort through some records containing information regarding students and their enrollment. The records are outdated and some of them are incomplete. A student will graduate exactly 4 years after the day they join (disregard leap years and leap seconds for this exercise).

**Input**

The first line of input will contain a single integer n that indicates how many test cases to follow. Each test case that follows begin with today’s date, in the MM DD YYYY format, followed by a number r, the number of students that might be graduating. The next r lines will each contain the name of the recruit, the month they joined, the day they joined, and the year they joined, but not necessarily in that order. You may assume that all years will be 4-digit numbers, and the remaining two-digit numbers will be the month and date. In the event that it is impossible to determine which number is the day and which number is the month, throw out the data because it is bad data (with one exception: If the month and day are the same, then it doesn’t matter which one is which). Some lines may not have enough data. In that case, throw it out because you don’t have enough data. You may assume that the current date will always be in MM DD YYYY format and be a valid date.

**Output**

For each test case, print the name of the recruit and the number of days that they will be graduating in. If the recruit should have graduated already, instead print “`name` already graduated!” For every data set thrown out, print “Bad data for `name`”. If you were unable to gather enough data, print “Don't have enough data on `name`”. Print a newline in between every test case.

**Example Input File**

3

01 01 2000

3

Joe 1997 13 02

02 14 1997 Mama

Andrew 1995 02 15

04 08 2019

1

BadData 11 11

04 23 2018

2

MoreBadData 23 24 2015

Mr\_Armstrong 31 08 2000

**Example Output to Screen**

Joe graduates in 43 days

Mama graduates in 44 days

Andrew already graduated!

Don't have enough data on BadData

Bad data for MoreBadData

Mr\_Armstrong already graduated!