

**STA Online Computer Programming Contest (DWITE)
December 2002**

Problem 2

DECEMBER 25

Given that December 25, 2002 falls on a Wednesday, calculate the day of the week that December 25 falls on for any given year.

Remember that a year is a leap year if either (i) it is divisible by 4 but not by 100 or (ii) it is divisible by 400. For example, 2004, 2000 and 1996 are leap years, but 1900, 1905, 2100 are not leap years.

The input file (DATA2) will contain five lines of data. Each line will contain a year (Y), $1900 \leq Y \leq 2900$.

The output file (OUT2) will contain five lines of data. Each line will contain the day of the week (in uppercase) that December 25 falls on for the respective year from the input file.

Hint: If it is of any assistance, January 1, 2002 fell on a Tuesday.

Sample Input (Only three years given)

2001
2003
2004

Sample Output

TUESDAY
THURSDAY
SATURDAY