Time limit: 2.0s Memory limit: 256M

Canadian Computing Competition: 2009 Stage 1, Junior #3

A mobile cell service provider in Ottawa broadcasts an automated time standard to its mobile users that reflects the local time at the user's actual location in Canada. This ensures that text messages have a valid local time attached to them.

For example, when it is 1420 in Ottawa on Tuesday February 24, 2009 (specified using military, 24 hour format), the times across the country are shown in the table below:

Pacific Time	Mountain Time	Central Time	Eastern Time	Atlantic Time	Newfoundland Time
Victoria, BC Tuesday	Edmonton, AB Tuesday	Winnipeg, MB Tuesday	Toronto, ON Tuesday	Halifax, NS Tuesday	St. John's, NL Tuesday
2/24/2009	2/24/2009	2/24/2009	2/24/2009	2/24/2009	2/24/2009
1120 PST	1220 MST	1320 CST	1420 EST	1520 AST	1550 Newfoundland ST

Write a program that accepts the time in Ottawa in 24 hour format and outputs the local time in each of the cities listed above including Ottawa. You should assume that the input time will be valid (i.e., an integer between 0 and 2359) with the last two digits being between 0 and 59).

You should note that 2359 is one minute to midnight, midnight is 0, and 13 minutes after midnight is 13. You do not need to print leading zeros, and input will not contain any extra leading zeros.

Sample Input

1300

Sample Output

1300 in Ottawa 1000 in Victoria 1100 in Edmonton 1200 in Winnipeg 1300 in Toronto 1400 in Halifax 1430 in St. John's