

Good Times

Problem Description

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	Edmonton, AB	Winnipeg, MB	Toronto, ON	Halifax, NS	St. John's, NL
Tuesday	Tuesday	Tuesday	Tuesday	Tuesday	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. Note that a valid input time is an integer between 0 and 2359 with the last two digits being between 00 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 in your output.

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

NOTE: If invalid input is received, print "Provide an integer value between 0 and 2359 inclusive."
Then prompt again for input. This should repeat until valid input is received.

Sample Input

2459

Please provide an integer value between 0 and 2359.

1300

Sample Output

1300 in Ottawa
1000 in Victoria

etc.

Please note: your program's output
must match the expected output
precisely.