**The Calorie Recording Problem**

Suppose that you exercise daily throughout the year and record calories you burn after each daily exercise. Suppose further that you record you collate each week's data together. Assuming days are numbered from 1 to 7, calories and weeks are numbered from 1 to 52, the calories can be assigned to a 7 X 52matrix array Calories as shown below. Therefore, Calories(D, W) contains the Dth day's calorie on the Wth week. In particular, the second column of the array,

calories(1, 2), Calories(2, 2), Calories(3, 2), Calories(4, 2), Calories(5, 2), Calories(6, 2), Calories (7, 2)

contains the seven different calories recorded from Monday to Sunday in Week 2.

declare Calories [1..7, 1..52]

|  |
| --- |
|  |
|  | |  | Week 1 | Week 2 | … | Week 52 |
|  | |  | 1 | 2 | … | 52 |
| Monday | | 1 | 1500 | 1506 | .. | 1124 |
| Tuesday | | 2 | 400 | 500 | … | 960 |
| Wednesday | | 3 | … | … | … | … |
| Thursday | | . | … | … | … | … |
| Friday | | . | … | … | … | … |
| Saturday | | . | … | … | … | … |
| Sunday | | 7 | 1000 | 600 | … | 850 |

In the above representation, the rows correspond to the days (i.e. Monday to Sunday) and the columns refer to the weeks (i.e. week 1 to week 52).

**Problem 1:** Calculate and display weekly total calories recorded throughout the year

**Problem 2:** Calculate and display weekly average calories recorded throughout the year

**Problem 3:** Calculate and display daily average calories recorded throughout the year

**Problem 4:** Display the maximum calorie recorded in a given week.

**Problem 5:** Display the minimum calorie recorded in a given week.