ACSL

American Computer Science League

**008 -2013 - 2014**

**Contest #1**

ACSL Scrabble

Intermediate Division

Problem: ACL Scrabble is a lettered tile game played on a grid game board. The board for this program will be 4 x 10. The grid squares are numbered as below:

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |

The squares that are every other multiple of 3 (3, 9, 15...) are Double Letter score squares.

The squares that are multiples of 5 and not used above are Triple Letter score squares.

The squares that are multiples of 7 and not used above are Double Word score squares.

The squares that are multiples of 8 and not used above are Triple Word score squares.

Letter values will come from the following chart:

 A, E - 1 point

 D, R - 2 points

 B, M - 3 points

 V, Y - 4 points

 J, X - 8 points

INPUT: There will be 6 lines of input. The first line will give the letters of the word. The word will always have 4 letters. The remaining 5 lines will be starting locations for the word and a direction: horizontal (H) or vertical (V).

OUTPUT: For each starting location, print the total points scored by the word. No word will have more than one word score multiplier

SAMPLE INPUT SAMPLE OUTPUT
1. J, A, V, A 1. 18
2. 1, V 2. 17
3. 2, H 3. 42
4. 6, V 4. 30
5. 12, H 5. 66
6. 21, H

TEST INPUT TEST OUTPUT

1. X, R, A, Y

2. 3, V 1. 27

3. 7, V 2. 32

4. 10, V 3. 45

5. 31, H 4. 48

6 35, H 5. 31