C++ Fundamentals Exam

The following tasks should be submitted to the SoftUni Judge system.

Task 2 – Space

You are a spaceship (marked as **"K"**) on a quest to gather as much space dust as possible. In order to collect the space dust, you must reach a planet, marked as **V**, **S**, **U** or **N**. Once you've reached a valid planet, you should **increase your space dust value** with the **ascii value of the planet's symbol** (Example: V -> 86). If you reach an invalid planet, you lose **half of your current space dust**. If you go out of the matrix, you lose **quadruple of your current space dust**. The planets that you have reached should be marked with **"-"**

The valid commands you will receive are:

L -> Left
R -> Right
U -> Up
D -> Down
S -> Stop

You are to move until you reach command "**S**".

After you have stopped moving, you should print the sum of the space dust you have collected and the initial space dust in this format: "**Space Dust Collected: {spaceDust}**" and **the matrix** afterwards

Input

- On the **first line**, you are given the integer **N** - **number of rows and columns** of the matrix
- On the **second line**, you are given a sequence of elements **- the matrix**
- On the **third line,** you are given the **initial space dust**
- On the next **lines**, you are given certain commands – **L, R, U, D**
- On the final line, you receive the command – **"S"**

Output

- Print the collected **space dust** and **the matrix.**

Constraints

- The size of the matrix will be between **[2…5]**
- The spaceship will always be indicated with **'K'**
- The valid planets will always be indicated with **'V'**, **'S'**, **'U'** or **'N'**
- There will be cases, where invalid and valid symbols are repeated
- There will not be a case, where the space dust become a floating point number

Examples

Input	Output
3	Space Dust Collected: 6
J V E	J - -
a K M	a - -

Z F A	Z K -
10	
U	
R	
D	
D	
L	
S	