**02. Martian Explorer**

*Your rover has landed on Mars, and it needs to find resources to start humanity's first interplanetary colony.*

You will receive a **6x6 field on separate lines** with:

* **One rover** - marked with the letter **"E"**
* **Water deposit** (one or many) - marked with the letter **"W"**
* **Metal deposit** (one or many) - marked with the letter **"M"**
* **Concrete deposit** (one or many) - marked with the letter **"C"**
* **Rock** (one or many) - marked with the letter **"R"**
* **Empty positions** will be marked with **"-"**

After that, you will be given the **commands for the rover's movement** on **one line** separated by **a comma** **and a** **space** (", "). Commands can be: **"up"**, **"down"**, **"left"**, or **"right"**.

For **each command**, the rover **moves in the given directions** **with one step**, and it can land on one of the given types of **deposit** or a **rock**:

* When it **lands on a deposit**, you must print the **coordinates of that deposit** in the format shown below and **increase** **its value by 1**.
* If the rover **lands on a rock**, it gets **broken.** Print the **coordinates where it got broken** in the format shown below, and **the program ends**.
* If the rover **goes out of the field**, it should **continue** from the **opposite side** in the **same direction**. Example: If the rover is at **position (3, 0)** and it needs to **move left** (outside the matrix), it should be placed at **position (3, 5)**.

The rover **needs to find at least one of each** deposit to **consider the area suitable** to start our colony.

**Stop the program** if you **run out of commands** or the **rover gets broken**.

### Input

* On the **first 6 lines**, you will receive the **matrix**.
* On the **following line**, you will receive the commands for the rover **separated by a comma and a space.**

### Output

* For each deposit found while you go through the commands, print out on the console: **"{Water, Metal or Concrete} deposit found at ({row}, {col})"**
* If the rover hits a rock, print the **coordinates where it got broken** in the format: **"Rover got broken at ({row}, {col})"**

After you go through all the commands or the rover gets broken, print out on the console:

* If the rover **has found at least one** **of each deposit**, print on the console: **"Area suitable to start the colony."**
* Otherwise, print on the console: **"Area not suitable to start the colony."**

**See examples for more clarification.**

### Examples

|  |  |
| --- | --- |
| **Input** | **Output** |
| - R - - - -  - - - - - R  - E - R - -  - W - - - -  - - - C - -  M - - - - -  down, right, down, right, down, left, left, left | Water deposit found at (3, 1)  Concrete deposit found at (4, 3)  Metal deposit found at (5, 0)  Area suitable to start the colony. |
| R - - - - -  - - C - - -  - - - - M -  - - W - - -  - E - W - R  - - - - - -  up, right, down, right, right, right | Water deposit found at (3, 2)  Water deposit found at (4, 3)  Rover got broken at (4, 5)  Area not suitable to start the colony. |
| R - - - - -  - - C - - -  - - - - M -  C - M - R M  - E - W - -  - - - - - -  right, right, up, left, left, left, left, left | Water deposit found at (4, 3)  Metal deposit found at (3, 2)  Concrete deposit found at (3, 0)  Metal deposit found at (3, 5)  Rover got broken at (3, 4)  Area suitable to start the colony. |