

Super Mario is a famous platform game developed by Nintendo. In this game, a stage is composed of several blocks, each of which can be viewed as a controllable object. Now let’s consider a simple version of such a game. In this simple version one, a block is composed of characteristics: 1) the type of background, 2) the type of block, and 3) the specific instance for the given block type. The type of background is in one of the following instances: sunny, cloudy, rainy, dungeon, and water. The type of block can be in one of the following states: item, obstacle, enemy, and player. Finally, the specific instance depends on the block type. For block type item, it can be red mushroom, green mushroom, or fire flower. For block type obstacle, it can be empty (no obstacle), brick, question, or pipe. There are also three kinds of enemy (goomba, troopa, koopa), and two kinds of player (Mario, Luigi). In short, a block can be represented by two enumeration constants, and one union of four enumeration constants.

Attribute	0	1	2	3	4
Background	Sunny	Cloudy	Rainy	Dungeon	Water
Block	Item	Obstacle	Enemy	Player	
Item	Red Mushroom	Green Mushroom	Fire Flower		
Obstacle	Empty	Brick	Question	Pipe	
Enemy	Goomba	Troopa	Koopa		
Player	Mario	Luigi			

To quickly modify the status of each block, all blocks are stored in a random-access file named as “test\_input\_Mario.txt”. Your goal is to read the contents stored in such file, and write the contents in a text file named as “my\_output\_Mario.txt”.

**Requirement: Read the binary input from file stream rather than the standard input stream, and use array of structure to store the data. Write the contents to a file rather than the standard output stream.**

### Input

The input has 30,000 records and ends with an EOF marker. Each record is a structure of two enumeration constants, and one union of four enumeration constants.

### Output

Output each record according to its specific block instance and the background information as follows:  
*specific\_block\_instance in background* Block  
Please capitalize each words except the preposition “in”, e.g. ”Mario in Dungeon”. Each block output should end with a newline character.

### Sample Input

No sample input is provided.

### Sample Output

Mario in Dungeon Block  
Luigi in Water Block  
Red Mushroom in Sunny Block