

Magic: The Gathering (MTG) is a famous card game designed by Richard Garfield and released by Wizards of the Coast (WoC). In recent years, WoC has dedicated to develop a platform for playing *MTG* on computers and mobile devices. To accomplish this, WoC tries to store their cards in a file. To ease the computation of the cards in computer, we need to prepare data structures as a container to store the cards with the following members:

- 1. Name: a string of maximum 50 characters (including the null character)
- 2. Cost: a user defined data structures with six integers, representing the cost of colorless, White, Red, Green, Blue and Black mana
- 3. Type: a string of maximum 50 characters (including the null character)
- 4. Power: an integer
- 5. Toughness: an integer

Try to write a program with above structures to read from a random access file with 285 records of MTG cards, store them in an array of cards, and output the contents.

Requirement: Input from a Comma-Separated Values (CSV) file “test_input_MTG21RAFO.txt” rather than standard input stream, use an array of MTG card structure to store the data, and output the card set to a random access file “my_output_MTG21RAFO.txt” rather than standard output stream.

Hint: Remember to reset the memory of the structure array before using it.

Input

The input named as “test_input_MTG21RAFO.txt” is a CSV file having 285 records and ending with EOF. Each record contains five fields, including:

- 1. Name: a string of the card name
- 2. Cost: the cost to cast the spell. Cost can be any combination (with replacement) of White, Red, Green, Blue and Black, starting with an ‘x’ or an integer number which represent the cost of colorless mana.
- 3. Type: The type of the card. There may be a main type and a subtype. If so, they will be separated by ‘-’.
- 4. Power: The power of the card. Only creatures have power.
- 5. Toughness: The toughness of the card. Only creatures and planeswalkers have toughness.

Note that fields may contain missing values which are represented by a space character.

Output

Prepare an array of structure to store the input. Output the whole card set to a random access file named as “my_output_MTG21RAFO.txt”.

Sample Input

Adherent of Hope,1White,Creature---Human Soldier,2,1
Alchemist's Gift,Black,Instant, ,
Animal Sanctuary, ,Land, ,
Primal Might,xGreen,Sorcery, ,

Sample Output

Unavailable.