

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 text file. However, to ease the computation of the cards in computer, we need to prepare data structures as a container to store the cards. Try to write a program with proper structures to store the card sets in an array, and display the contents.

Requirement: use array of structure to store the data.

Input

The input has 285 records and ends with the EOF. Each record contains five fields which are separated by the comma, 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 a structure to store the input. This structure must contain the following members: name (string), cost (**mana**), type (string), power (integer), and toughness (integer), where **mana** is another user defined structure with six integer members which represent the cost of colorless, White, Red, Green, Blue and Black mana. Display an 'x' if the cost of colorless mana is a variable.

Output the records according to the format shown in the sample output. Two consecutive fields are separated by three spaces, except the fields Name and Type, where they are followed by 24 and 18 spaces, respectively. All the field values are aligned right except Name and Type which are aligned right.

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

Name	Colorless	White	Red	Green	Blue	Black	Type	Power	Toughness
Adherent of Hope	1	1	0	0	0	0	Creature	2	1
Alchemist's Gift	0	0	0	0	0	1	Instant	0	0
Animal Sanctuary	0	0	0	0	0	0	Land	0	0
Primal Might	x	0	0	0	0	0	Sorcery	0	0