

# LCC '22 Contest 5 J2 - Pieces

---

**Time limit:** 2.0s    **Memory limit:** 64M

---

Leo wants to bring a chess set on his field trip. However, the set is quite old (it even has some leftover cheese on it from when he last brought it to a field trip), and after a quick headcount, he realizes that he is missing a few pieces! Given  $N$  pieces that his chess set currently contains, can you help Leo figure out which pieces he is missing?

**Note:** A complete chess set has 32 pieces, 16 black ones and 16 white ones. For each color, there are two bishops (**B**), two knights (**N**), two rooks (**R**), a king (**K**), a queen (**Q**), and eight pawns (**P**).

## Constraints

---

$$1 \leq N \leq 31$$

## Input Specification

---

The first line of input contains one integer  $N$ , the number of chess pieces Leo already has.

The next  $N$  lines will contain two space-separated characters: the color and type of the  $i^{\text{th}}$  chess piece that Leo has.

For example, **B B** represents a black bishop, and **W Q** represents a white queen.

## Output Specification

---

In any order, for each piece that Leo is missing, output its color and type separated by a space.

## Sample Input

---

30

B B

W P

B K

B Q

B R

B N

B P

B N

B P

B P

B P

B P

W P

B P

W P

W B

W B

W Q

W R

B P

W R

W N

W N

B B

W P

W P

B R

W P

W P

W P

## Sample Output

---

W K

B P