

## 問題 2 – 魔物獵人－物語 II

(10 分)

### 問題敘述

《魔物獵人－物語 II》是一款今年夏天發行的回合制 RPG 遊戲，其豐富的主線劇情和有趣的戰鬥方式深受大家的喜歡。主要遊玩平台有 PC 和 Nintendo Switch，該作品在兩者的銷量皆有不錯的表現。看到這款遊戲的 Arvin 也立刻下單開始玩，然而他十分不擅長這款遊戲的戰鬥系統，想要請你幫忙撰寫一支程式告訴他要如何戰鬥。

戰鬥時，玩家會操作「騎士」角色與自己的隨行獸挑戰不同的魔物。和其他的回合制 RPG 遊戲類似，雙方會在每一輪選擇一種攻擊方式，之後再進行傷害的結算。為求題目簡單，請以以下規則為主：

4. 總共有三種攻擊型態：力量 (Power)、速度 (Speed)、技巧 (Technical)，其中速度勝過力量、技巧勝過速度、力量勝過技巧。下圖中，紅色代表力量、藍色代表速度、綠色代表技巧，箭頭代表勝過。



5. 每個回合騎士與對方魔物各自選取一個攻擊型態。
6. 雙方決定後，判定輸贏狀態，勝者可以攻擊敗方、平手則沒有攻擊發生。

有了「納比路」（一隻艾路）的幫忙，你已經在戰鬥發生之前就得到對方接下來  $N$  個回合的攻擊型態。然而，只有在「每個回合都是勝利的情形下」該預測才會是有用的，玩家也才能獲得勝利。因此，請幫忙計算必勝玩法！

### 輸入格式

輸入總共有兩行。

第一行有一個整數  $N$ ，代表對決回合的數量。

第二行有一個  $N$  個字串，每個字串代表該回合對手使用的攻擊型態，攻擊型態只會是 {"Power", "Speed", "Technical"} 其中一種。

### 輸出格式

請輸出一行，包含  $N$  個攻擊型態。所有輸出兩兩之間使用空格隔開，行尾不能有多餘空格、需換行。

## 資料範圍

$1 \leq N \leq 10^5$

### 輸入範例 1

1

Power

### 輸出範例 1

Speed

### 輸入範例 2

3

Power Speed Technical

### 輸出範例 2

Speed Technical Power

### 輸入範例 3

6

Speed Speed Technical Speed Power Technical

### 輸出範例 3

Technical Technical Power Technical Speed Power

## 範例說明

1. 對戰只有一個回合，對方使用「力量」，我方使用「速度」即可全勝。
2. 對戰共有三個回合，對方依序使用「力量、速度、技巧」，我方使用「速度、技巧、力量」即可全勝。
3. 對戰共有六個回合，對方依序使用「速度、速度、技巧、速度、力量、技巧」，我方使用「技巧、技巧、力量、技巧、速度、力量」即可全勝。

## Q2: Monster Hunter Stories II

(10 points)

### Description

“Monster Hunter Stories II” is a turn-based RPG game just released this summer. Its wonderful story and interesting battle attract people’s attention. Arvin is also attracted and bought the game recently. However, he’s unfamiliar with the battle system, and he wants you to write a program for him to indicate him how to battle.

During the battle, the player controls the role “rider” and battle against other monsters with the his “monsties”. Similar to other turn-based games, both sides decide one action on the beginning of each turn, and the damages are finalized afterwards. For simplicity of this problem, we use the simplified rules as below:

1. There’re three types of attacks: Power, Speed and Technical. Speed beats Power, Technical beats Speed and Power beats Technical. On the image below, the red symbol represents Power, the blue one represents Speed, and the green one represents Technical.



2. Both sides can choose only from the three attack types above.
3. After both sides decide their attack types, a winner is selected by the types they play. The winner can cause damage to the loser. If a tie occurs, nothing happens.

With the help of “Navirou” (a Felyne), you already know the attacking types the opposite is going to use for the N-turns battle. However, only when you play a “wonderful play” --- you win on all the turns --- will the prediction be useful. Therefore, please determine which types you need to play to achieve the “wonderful play”.

### Input Format

The input contains two lines.

On the first line, there’s an integer  $N$  indicating the number of rounds.

On the second line, there’re  $N$  strings separated by spaces. Each string is one of {“Power”, “Speed”, “Technical”}.

## Output Format

Please output one line of  $N$  strings, separated by spaces, representing the type of attack you're going to use during the game. There should NOT be additional space at the end of the line. Also, you need to output a newline character at the end of the line.

## Data Range

$$1 \leq N \leq 10^5$$

### Input Example 1

```
1
Power
```

### Output Example 1

```
Speed
```

### Input Example 2

```
3
Power Speed Technical
```

### Output Example 2

```
Speed Technical Power
```

### Input Example 3

```
6
Speed Speed Technical Speed Power Technical
```

### Output Example 3

```
Technical Technical Power Technical Speed Power
```

## Example Explanation

1. There are only 1 round. The opposite uses "Power", and we respond with a "Speed" to win the battle.
2. There are 3 rounds. The opposite uses "Power, Speed, Technical", and we respond with "Speed, Technical, Power" to win the battle.
3. There are 6 rounds. The opposite uses "Speed, Speed, Technical, Speed, Power, Technical", and we respond with "Technical, Technical, Power, Technical, Speed, Power" to win the battle.