
10. Snooze

Program Name: Snooze.java

Input File: snooze.dat

When hitting the snooze button in the morning, it's important to know how much you're putting off the inevitable.

Each time you hit the snooze button on your alarm clock, it will wait 9 more minutes before activating again. Given the timing of the initial alarm and the number of times snooze is hit, show what your LED clock display will look like when you finally get up.

Your alarm clock displays digits in the following way using underscore ('_') and pipe ('|') characters:

```
  _ |   _ |   _ |   _ |   _ |   _ |   _ |   _ |
 |  |   |  |   |  |   |  |   |  |   |  |   |  |
 |  |   |  |   |  |   |  |   |  |   |  |   |  |
```

It uses asterisks (*) to separate hours from minutes, as in the following example:

```
  |  _ | *  _ |  |  |
  |  _ | *  _ |  |  |
```

Input

- The first line of input will contain a single integer n that indicates the number of scenarios you need to process.
- Each scenario n will have two parts:
 - There are three lines that make up the time in digits that you see on your clock when the alarm first activates.
 - All digits take up a 3x3 array of characters in the input and are right-justified.
 - Digits are separated from each other and the asterisks by a single column of spaces.
 - There is no leading zero for single-digit hours.
 - The fourth line will contain a single integer m that indicates the number of times you hit snooze, $0 \leq m \leq 100$.

Output

For each scenario in the input, output three lines showing your alarm clock's state when you finally get up.

Example Input File

2

```
  | *  _ |  |  |
  | *  _ |  |  |
  |  _ |  |  |
```

1

```
  |  _ | *  _ |  |  |
  |  _ | *  _ |  |  |
  |  _ |  |  |
```

3

Example Output to Screen

```
  | *  |  _ |
  | *  |  _ |
```

```
  | *  |  _ |
  | *  |  _ |
```