Not Number Theory 🔒 locked

Problem   Submissions   Discussions

Time Limit $: C/C++\ (1s)\ ,\ Java\ (2s)$
Memory Limit $: 256\ MB$

You are given an integer less than 10^5. Some, maybe none or all, of its digits have $?$ in its place.

You need to replace each of the $?$ with any digits $(0$ to $9)$ to form the final integer. All the $?$ **does not** require being replaced by the same digit, but you may use the same digit multiple times as replacement.

Find the final integer that has the most set bits (number of 1's) in its binary representation. If there are many such options, output the **largest possible** integer.

Note that the final integer may have leading zeros. But you must output without the leading zeros.

Input Format

The first line contains a single integer T — the number of test cases.

Each test contains a single line with a string s representing the integer given to you. It contains only $?$ and digits from 0 to 9. It won't have any leading zeros but may have leading $?$.

Constraints

$1 \leq T \leq 100$

$1 \leq |s| \leq 5$

Output Format

For each test case, output the final integer in separate lines. If there are many such options, output the largest possible integer. The output must not contain any leading zeros.

Sample Input 0

```
3
??1
?
5?623
```

Sample Output 0

```
991
7
58623
```

```c
1  #include <stdio.h>
2  #include <string.h>
3  #include <math.h>
4  #include <stdlib.h>
5
6  int main() {
7
8      /* Enter your code here. Read input from STDIN. Print output to STDOUT */
9      return 0;
10 }
```

Line: 1 Col: 1

⬆ Upload Code as File   ☐ Test against custom input   Run Code   Submit Code