

## 3546 Dramatic Multiplications

Hassan, helping with his younger brother's homework, found out that when you multiply 102564 by 4, its right-most digit moves to the left, and the other digits move one position to the right; i.e.  $4 \times 102564 = 410256$ . We call a number that has this property when multiplied by  $n$ , an  $n$ -dramatic number. For instance, 102564 and 128205 are both 4-dramatic. Given two one-digit numbers  $n$  and  $k$ , the goal is to find the smallest  $n$ -dramatic number that its rightmost digit is  $k$ .

### Input

On the first line of the input, there is an integer  $t$ , which is the number of cases that follow. Each test case, is on a line by itself, and contains two integers  $n$  and  $k$ , where  $1 \leq n \leq 9$ , and  $1 \leq k \leq 9$ .

### Output

For each test case, output a single integer on a line by itself, which is the smallest  $n$ -dramatic number that its rightmost digit is  $k$ . If no such number exists, output '0' instead.

### Sample Input

```
2
4 5
2 1
```

### Sample Output

```
128205
0
```