

## C. Book Reading

time limit per test: 1 second

memory limit per test: 256 megabytes

input: standard input

output: standard output

Polycarp is reading a book consisting of  $n$  pages numbered from 1 to  $n$ . Every time he finishes the page with the number divisible by  $m$ , he writes down the last digit of this page number. For example, if  $n = 15$  and  $m = 5$ , pages divisible by  $m$  are 5, 10, 15. Their last digits are 5, 0, 5 correspondingly, their sum is 10.

Your task is to calculate the sum of all digits Polycarp has written down.

You have to answer  $q$  independent queries.

### Input

The first line of the input contains one integer  $q$  ( $1 \leq q \leq 1000$ ) — the number of queries.

The following  $q$  lines contain queries, one per line. Each query is given as two integers  $n$  and  $m$  ( $1 \leq n, m \leq 10^{16}$ ) — the number of pages in the book and required divisor, respectively.

### Output

For each query print the answer for it — the sum of digits written down by Polycarp.

### Example

**input**[Copy](#)

```
7
1 1
10 1
100 3
1024 14
998244353 1337
123 144
1234312817382646 13
```

**output**[Copy](#)

```
1
45
153
294
3359835
0
427262129093995
```

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math \*1200

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