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 ($1 \le q \le 1000$) — the number of queries.

The following q lines contain queries, one per line. Each query is given as two integers n and m ($1 \le n, m \le 10^{16}$) — 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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