

2683 - Base B

Description

Given a number N in it's representation in decimal base you want to convert this number in a base b ($2 \leq b \leq 16$).

For the representation of the base 11 to 16, use the letters A through F to represent the digits from 10 to 15.

Example:

1615 base 10 = 64F base 16

Input specification

The first line of input will contain a number t ($1 \leq t \leq 100$) the number of cases for each case a number N

($1 \leq N \leq 1000000$) in base decimal and a number b ($1 \leq b \leq 16$) representing the base.

Output specification

For each case, print the number N in base b.

Sample input

```
4
456 10
856 16
523 8
1024 2
```

Sample output

```
456
358
1013
10000000000
```

Hint(s)