Base Change It

For this problem, you will write a program that interprets a string of digits as if it were in octal(base 8), in decimal (base 10) or in hexadecimal (base 16).

Input Format

The first line of input contains a single decimal integer **P**, which is the number of data sets that follow. Each data set should be processed identically and independently.

Each data set consists of a single line of input. It contains the data set number, **K**, followed by a single space, followed by a string of at most 7 digits.

Constraints

$$1 \leq p \leq 10000$$

$$K < 100$$

Output Format

For each data set there is one line of output. The single output line consists of the data set number, K, followed by a space followed by 3 space separated decimal integers which are the value of the input as if it were interpreted to as octal, decimal and hexadecimal respectively. If the input value cannot be interpreted as an octal value, use the value 0.

Sample Input 0

```
4
1 1234
2 9
3 1777
4 129
```

Sample Output 0

```
1 668 1234 4660
2 0 9 9
3 1023 1777 6007
4 0 129 297
```