

# The total sales by day

You are given a list of transactions, each of them includes date, product code, quantity and selling price.

Your task is to write a program to print total quantity and total revenue by day from minimum date to maximum date (**Note**: print all days from minimum date to maximum date).

For any date that has no transaction, print date, total quantity as 0 and total revenue as 0.

## Input

- The first line contains one integer  $N$  - the number of transactions ( $1 \leq N \leq 10^5$ ).
- Each line in the next  $N$  lines contains 4 integers representing a transaction. All of these do not exceed  $10^9$ , the difference between the maximum date and the minimum date is not more than  $10^5$ .
- Dates are in ascending order.

## Output

For each day, output the date, total quantity, and total revenue by that day. Dates are listed in ascending order.

## Sample

| Input       | Output     |
|-------------|------------|
| 8           | 10 20 2000 |
| 10 1 20 100 | 11 0 0     |
| 12 2 10 150 | 12 25 3000 |
| 12 3 15 100 | 13 0 0     |
| 14 1 15 200 | 14 45 6300 |
| 14 2 30 110 | 15 60 6250 |
| 15 1 25 90  |            |
| 15 3 25 120 |            |
| 15 1 10 100 |            |