

# Update the array !

You have an array containing  $n$  elements initially all 0. You need to do a number of update operations on it. In each update you specify  $l$ ,  $r$  and  $val$  which are the starting index, ending index and value to be added. After each update, you add the 'val' to all elements from index  $l$  to  $r$ . After 'u' updates are over, there will be  $q$  queries each containing an index for which you have to print the element at that index.

## Input

First line consists of  $t$ , the number of test cases. ( $1 \leq t \leq 10$ )

Each test case consists of " $n$   $u$ ", number of elements in the array and the number of update operations, in the first line ( $1 \leq n \leq 10000$  and  $1 \leq u \leq 100000$ )

Then follow  $u$  lines each of the format " $l$   $r$   $val$ " ( $0 \leq l, r < n$ ,  $0 \leq val \leq 10000$ )

Next line contains  $q$ , the number of queries. ( $1 \leq q \leq 10000$ )

Next  $q$  lines contain an index ( $0 \leq index < n$ )

## Output

For each test case, output the answers to the corresponding queries in separate lines.

## Example

### Input:

```
1
5 3
0 1 7
2 4 6
1 3 2
3
0
3
4
```

### Output:

```
7
8
6
```