

# Bonus for Eid

Jabir is student of class SIX. To celebrate Eid , he goes to grandfather house. All of his cousins also visit grandfather house to celebrate EID. Jabir has  $n-1$  cousins and  $m$  uncles, so there are total  $n$  grandchildren of his grandfather. And the age of all cousins of Jabir and Jabir are between 1 to  $n$ . and everyone age is unique.

In EID day Jabir goes to Eid-Gah Moidan to say Eid prayer with his uncles and cousins. After Eid prayer most fun event begins, and that is collecting EID Bonus from their uncles.

Uncles are also interesting, they decided to give Eid bonus in a different way . First uncle choices two ages and gives some bonus from whose age are between his choices ages , then second uncle choices two age and occurs the same and so on.

After collecting , Jabir and his cousins are calculating the amount of total taka they get, Now your task is to print the amount of bonus of  $p$ 'th age's cousins.

## Input:

First line contains two integer  $n(1 \leq n \leq 100000)$  and  $m(1 \leq m \leq 100000)$ ,  $n$  indicates number of grandchildren of Jabir's grandfather and  $m$  indicates number of Jabir's uncles. Next  $m$  lines indicate the uncles first choice age  $x$  , second choice age  $y$  and amount of Eid Bonus( $0 \leq \text{Eid Bonus} \leq 100$ ) of  $i$ th uncle. ( $1 \leq x \leq y \leq n$ ) . Program should be terminated by EOF.

Next line  $t$  indicates the number of query( $t \leq 100000$ ) , and next  $t$  lines says an integer  $p(1 \leq p \leq n)$

## Output:

You Just print the amount of total EID Bonus of  $p$ 'th age's Cousin.

Sample Input	Sample Output
5 2 1 5 5 2 3 6 3 1 2 3	5 11 11
10 3 1 3 10 4 6 8 7 10 6 2 1 4	10 8

**Database is huge, so use faster I/O to save from TLE**

**Problem Setter:**

**Subrato Mollick**