

1007

Problem Description

Koyuki

Noa

Noa

Noa


Koyuki

Noa

$\epsilon + 1$

$a_\delta, a_{\delta+1}, a_{\delta+2}, \cdots, a_{\delta+\epsilon}$

δ



$i \ 0 \leq i \leq \epsilon$


$a_{\delta+i}$

n

$b_1, b_2, b_3, \cdots, b_n$

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q



$1 \times p$

1

$b_x := p$



$2 \mid r$

2

$l \leq L \leq R \leq r$

$b_L, b_{L+1}, b_{L+2}, \cdots, b_R$

$R - L + 1$


0




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Input



 Noa  C++ 

 cin  cout 

$T \ 1 \leq T \leq 10$

$q + 2$

$n, q \ 1 \leq n, q \leq 2 \times 10^5$

n $b_1, b_2, b_3, \dots, b_n$ $0 \leq b_1, b_2, b_3, \dots, b_n \leq n$
 q op $1 \leq op \leq 2$ x, p
 l, r
 1 $op = 1$ $1 \leq x \leq n$ $0 \leq p \leq n$ 2 $op = 2$
 $1 \leq l \leq r \leq n$

Output

0 2

Sample Input

```

1
12 8
2 1 2 0 0 3 2 1 1 0 0 0
2 1 4
2 1 5
2 1 6
2 1 10
2 1 12
2 6 12
1 2 0
2 1 4

```

Sample Output

```

0
5
5
5
7

```

7

4

Hint

8

- - 1 2 $l = 1, r = 4$ 0
- - 2, 3, 4 2 $l = 1, r = 5/6/10$ $L = 1, R = 5$
 $b_1 = 2, b_2 = 1, b_3 = 2, b_4 = 0, b_5 = 0$ 5
- - 5, 6 2 $l = 1/6, r = 12$ $L = 6, R = 12$ $b_6 =$
 $3, b_7 = 2, b_8 = 1, b_9 = 1, b_{10} = 0, b_{11} = 0, b_{12} = 0$ 7
- - 7 1 $x = 2, p = 0$ $b_2 := 0$
- - 8 2 $l = 1, r = 4$ $L = 1, R = 4$ $b_1 = 2, b_2 =$
 $0, b_3 = 2, b_4 = 0$ 4