1001 ×××××

Problem Description

2025/7/27

$$f\left(l,r,L,R
ight) \qquad l,r,L,R \qquad \qquad 1 \leq l \leq r \leq n \;\; -n \leq L \leq R \leq n$$

$$x>0$$
 $f\left(l,r,L,R
ight)$ $f\left(l,r,L,R
ight)=-\infty$ f 998244353

Input

\times \times \times \times \times \times \times \times

$$T 1 \leq T \leq 10$$

$$n \ 1 \leq n \leq 2 imes 10^5$$

$$n a_1, a_2, a_3, \cdots, a_n 0 \le a_1, a_2, a_3, \cdots, a_n \le n$$

Output

998244353

f

Sample Input

2

3

0 2 1

5

0 0 0 0 0

Sample Output

3 20

0 540

Hint

$$3 \qquad l \leq 2 \ r=3 \ L \leq 1 \ R \geq 2$$

$$2 \times 1 \times 5 \times 2 = 20$$

$$0 \qquad L \leq 0 \ R \geq 0$$

$$15\times 6\times 6=540$$