nCr

Given two integers n and r. In how many ways can r items be chosen from n items?

Input Format

The first line contains the number of test cases T. Each of the next T lines contains two integers n and r.

Constraints

$1 \leq T \leq 10^5$
$1 \leq n \leq 10^9$
$0 \leq r \leq n$

Output Format

Output T lines, containing the required answer for the corresponding test case. Output all answers modulo 142857.

Sample Input

```
4
2 1
4 0
5 2
10 3
```

Sample Output

```
2
1
10
120
```