## Negative Score

Orianna is a great swimmer and she's going to a swimming competition this month and needs your help as she is highly paranoic about the results of the competition.

The competition consists in some sort of evaluations, every judge makes a score and, based on that score and the score of other contestants she will get a score belonging to her results, those scores are final, meaning that will not change in the competition.

Orianna requires this solution with urgency, she is getting evaluated on a lot of ways and she is very worried about her results, so she wants to know what is the worst score from an evaluation $A$ to other evaluation B inclusive.

## Input

The first line of the test data will start with an integer T representing the T test cases, then, T cases will follow, each of the cases starts with two integers N and Q , denoting the number of evaluations Orianna had, then, N integers will follow denoting the score on each evaluation, after that, $Q$ queries will begin, each query consist on two integers $A$ and $B$.

## Output

You must output the string "Scenario \#i:", a blank line and then the result of each query, remember, Orianna is interested on the worst score from evaluation $A$ to evaluation B inclusive.

## Example

## Input:

2
53
12345
15
13
24
53
1-2-4 3-5
15
13
24

## Output:

Scenario \#1:
1
1
2
Scenario \#2:
-5
-4
-4

## Constraints

- $1<=\mathrm{T}<=100$

Small input (30\%):

- $1<=\mathrm{N}<=1,000$
- $1<=Q<=1,000$
- -10^9 $<=\mathrm{Ni}<=10^{\wedge} 9$
- $1<=A<=B<=N$

Large input (70\%):

- $1<=\mathrm{N}<=100,000$
- $1<=Q<=100,000$
- -10^9 $<=\mathrm{Ni}<=10^{\wedge} 9$
- $1<=A<=B<=N$

Solutions rejudged due to weak test cases.

