

Language accepted by NFA

The problem assignment [is available in format pdf](#):

Public data

The public data set is intended for easier debugging and approximate program correctness checking. The public data set is stored also in the upload system and each time a student submits a solution it is run on the public dataset and the program output to stdout and stderr is available to him/her.

Public data

Additional

Input

1000 10 2

6 11 2 5 17 9

5 200 300 400 520 600

Output

INFINITE bj

Input

13000 3 2

2 14 1 3 11 4

1 12903

Output

FINITE ababaababbccbbaaabcbcca