

Problem Statement

Time is running out. You have a final match to play as a counter terrorist. You have N players each having a distinct **ID** from 1 to N . You have to choose some players on your team from these N players such that no two chosen players have consecutive numbers (as they tend to kill each other). Also you definitely have to choose some K players whose numbers are given. They are the **snipers**. Find the maximum number of players that you can choose.

Input Format

The first line contains 2 space-separated integers, N and K , where N is the total number of players and K is the number of players that have to be definitely in the team (the **snipers**).

The second line contains K space-separated integers that are the **IDs** of the snipers.

NOTE: There are no two snipers with consecutive numbers.

Constraints

$$2 \leq N \leq 2 \times 10^6$$

$$1 \leq K \leq N/2$$

$$1 \leq \text{ID of each sniper} \leq N$$

Output Format

You need to print the maximum number of players that you can have in your team.

Sample Input

```
8 2
6 2
```

Sample Output

```
4
```

Explanation

There are 8 players in total, among which you have to definitely choose players with ID 2 and 6.

To maximize the number of players in the team, you will choose the players with IDs 4 and 8, so that you will have a total of 4 players.

Camper: A player in a professional team dedicated to using the AWP sniper rifle.