

Problem D: Discus Domination

Time limit: 2 seconds

Debbie wants to participate in her school's discus throwing competition. To determine a participant's score, the organisers have laid out a consecutive line of n squares with numbers written on them.

The rules are simple. Your score is equal to the number written on the square where your discus lands.

However, Debbie is not good at throwing her discus very far. More precisely, she can throw a distance of at most m squares. Therefore, she has convinced the organisers that participants are allowed to start throwing from any square but lose points according to the number written on their starting square.

Furthermore, participants are not allowed to throw their discus onto a square behind them but are allowed to throw them on the same square they are standing on.

Debbie is very precise when throwing her discus. She is pretty sure she won't miss her target if it is in her throwing range. What is the highest score Debbie can obtain?



A discus thrower statue. Image from [Wikimedia Commons](#)

Input

The input consists of:

- One line with two integers n and m ($1 \leq n, m \leq 2 \cdot 10^5$), where n denotes the number of squares and m is the maximum number of squares Debbie can throw her discus forward.
- One line with n integers a_1, \dots, a_n ($0 \leq a_i \leq 10^9$), where a_i denotes the points written on square i .

Output

Print the maximum score Debbie can obtain.

Notes

In Sample Input 1, the optimal solution for Debbie is to stand on the square with number 1 and throw her discus to the square with number 5, which makes a score of $5 - 1 = 4$. Notice that Debbie may not throw her discus to the square with number 7 when standing on the square with number 1 as she must throw forward. Similarly, she cannot throw her discus to the square with number 6 as it is out of her throwing range.

Furthermore, scores can be negative. If Debbie were standing on square 7 and her discus lands on square 1, she would score $1 - 7 = -6$ points.

Sample Input 1

```
6 2
7 2 1 5 3 6
```

Sample Output 1

```
4
```

Sample Input 2

```
2 5
1 7
```

Sample Output 2

```
6
```

Sample Input 3

```
7 3
1 9 5 4 5 15 7
```

Sample Output 3

```
11
```