Stock Bot
1second, 32MB

You are running a bot that would buy and sell stocks. At any given time, the bot would keep at most 1 unit of a particular stock. In our case, let's say it's GOOG. The bot has one parameter **K**, the panic threshold. It works as follows.

- If the stock price of day **i** increases from the price of day **i** − 1 by at least **K** baht, and the bot does not currently have the stock, it will buy 1 unit of stock.
- If the stock price of day **i** decrease from the price of day **i** − 1 by at least **K** baht, and the bot currently have the stock, it will sell 1 unit of stock.

Again remember that the bot will not keep more than 1 unit of stock.

Let's see how the bot works in the following example. Assume that **K**=2, and the prices of 10 days are as follows.

$$1, 2, 4, 5, 6, 10, 9, 7, 8, 15$$

The bot will buy the stock on day 3 (price changes from 2 → 4), sell it on day 8 (price changes from 9 → 7), and finally buy the stock on day 10 (price changes from 8 → 15). Note that it does not buy on day 6 (price changes from 6 → 10) because it still have 1 unit of stock.
With this buying and selling data, the bot makes 7 − 4 = 3 baht. It also has 1 unit of stock at the end, but we will not take that into account.

Write a program that reads **K** and the prices of stock on **N** days and find out the amount of money the bot makes. Note that the bot can make mistakes so the amount of money it makes can be negative. Note that the bot will do nothing on day 1.

Input
The first line of the input contains two integers **N** and **K** (1<=N<=1,000; 1<=K<=1,000). The next **N** lines describe the prices of the stock. More specifically, line 1 + **i** contains an integer P_i, the stock price on day **i**. (0 <= P_i <= 1,000,000)

Output
Your program should output one integer, the amount of money the bot makes.

Example 1

Input	Output
10 2 1 2 4 5 6 10 9 7 8 15	3

More examples are on the next page.

Example 2

Input	Output
6 10 100 120 119 118 117 80	-40

Explanation. The bot buys the stock on day 2 and sells on day 6.

Example 3

Input	Output
7 5 100 120 110 120 110 120 110	-30

Explanation. The bot buys the stock on day 2, sells on day 3, buys on day 4, sells on day 5, buy on day 6, and sells on day 7.