BOI 2003
Balkan Olympiad in Informatics
Iasi Romania

Day **2**
Problem: `euro`
Source file: `euro.pas`, `euro.c` or `euro.cpp`
Country **:**

euro

You have just opened a new bank account, where you will receive amounts in euro currency. When you opened the account, you had no euros in it and no lei in your possession (lei is the currency used in Romania). During each of the next `N` days, you will receive various amounts of euros; the amounts may be negative, in which case the total amount of euros in your account will decrease. It is possible for you to have a negative balance of euros in your account at times. At the end of each day, the bank allows you to convert the **whole** amount of euro in your account into lei. The daily exchange rate varies according to the following rule: during the K^{th} day, a euro can be exchanged for `K` lei. The bank also charges you `T` lei for each conversion. Therefore, if at the end of day `K` you have `S` euros in your account, and you decide to convert them, you will receive `S*K-T` lei (of course, `S` can be negative). At the end of day `N`, you **must** convert your remaining euros into lei, even if the amount is non-positive.

Task

Your objective is to maximize the final amount of lei you have at the end of the `N`-day period.

Input data (file: `euro.in`)

The first line of the input file `euro.in` contains two integers, `N` and `T`, separated by blanks. The next line contains `N` integers, specifying the amount of euros you will receive at the beginning of each day.

Output data (file: `euro.out`)

The output file should contain a single line, with the maximum amount of lei you can obtain.

Constraints

- $1 \leq N \leq 34\ 567$
- $0 \leq T \leq 34\ 567$
- `80%` of the test cases will have $T \leq 255$
- The amount of euros you will receive each day is an integer from the interval `[-1000,1000]`
- You are only allowed to convert euros into lei, and not lei into euros.
- For the result, it is recommended that you use the data types `int64` or `extended` in Pascal and `long long` or `double` in C/C++ (depending on whether you want to use integer or floating point computations). It is guaranteed that the result fits into these data types, but it may exceed the bounds of smaller ones.

Example

euro.in	euro.out

`7 1`
`-10 3 -2 4 -6 2 3`
	`17`

Explanation

At the end of the first day, you exchange the `-10` euros you have received for `-11=-10*1-1` lei. The second conversion takes place at the end of the 5^{th} day, when you have `-1` euros in your account (`3-2+4-6`). The amount of lei you gain is `-6=(3-2+4-6)*5-1`. You make the last conversion at the end of the 7^{th} day, using the last `5` euros in your account (`2+3`). The amount of lei you gain is `34=(2+3)*7-1`. The final amount of lei is `17=-11-6+34.`

Time Limit: 0.4 seconds/test