Testcase format:

Input:

The first line conatins two integers n and k ($1 \le k \le n \le 3.10^5$).

The second line contains n integers $a_1, a_2, \ldots, a_n$ ($1 \le a_i \le 10^9$, $a_i \ge a_{i-1}$).

Output:

Print the minimum cost you can obtain by dividing the array a into k nonempty consecutive subarrays.

Code script for generating Large test cases:

Code script for generating large test cases is in "generate_testcase.cpp" file.

Instructions to run and compile the code script:

1- Open a new terminal window.
2- Change the directory to the directory in which generate_testcase.cpp is present.
3-After this enter the following command in the terminal to compile the source file assuming gcc compiler is installed. - "g++ generate_testcase.cpp"
4- Now run the program using the following command - "./a.out".
5- Now a file with name as "testcase.txt" will be generated in the current directory.

Note:-
Expected Input and output are in the file "sample_testcases.pdf".

Algorithm is running perfectly for all test cases satisfying the input constraints. So no negative test cases are found.

Testcases with minimum constraints and corner test cases with their output by the algrithm are illustrated in “testcases.pdf”.

Testcases with maximum constraints are in files “input_large_testcase1.txt” and “input_large_testcase2.txt” and output are in the files “output_large_testcase1.txt” and “output_large_testcase2.txt” respectively.