SOLVE LATER

Mathison and the divisible trios

Attempted by: **974** / Accuracy: **79%** / Maximum Score: **30** /
10 Votes

Tag(s): Easy-Medium, Hash Table, Simple-math

Mathison has discovered an old piece of paper with N integers written on it. Let's call this given sequence of numbers $A[]$. In his History class, Mathison has learnt that a trio of numbers is *special* if and only if their sum is divisible by a mythical constant M.

Mathison tries to find out how many **distinct** triplets of numbers, from the piece of paper, have their sum divisible by M. Unfortunately, this problem is quite hard to crack and he needs your help.

Input

The first line of the input file contains two space-separated integers, N and M, representing the number of integers and the mythical constant. The next line contains N space-separated integers, where the i^{th} integer represents $A[i]$.

Output

The output file should contain only one integer, the answer to Mathison's question.

Constraints

- $1 \leq N \leq 2 \times 10^5$
- $1 \leq M \leq 10^4$

BEST SUBMISSIONS

LANGUAGE: C

TIME (sec) 2.78464 | MEMORY (KiB) 1100

by Satyendra Kumar Bilthare

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CONTRIBUTOR

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THIS PROBLEM WAS ASKED IN

CHALLENGE NAME
November Easy '17

SOCIAL SHARE

- $0 \leq A[i] \leq 2 \times 10^9$

SAMPLE INPUT	SAMPLE OUTPUT
10 5 1 10 4 3 2 5 0 1 9 5	26

Explanation

There are 26 *special* trios: (0, 1, 2); (0, 1, 8); (0, 2, 5); (0, 2, 6); (0, 2, 9); (0, 3, 7); (0, 5, 8); (0, 6, 8); (0, 8, 9); (1, 2, 7); (1, 3, 4); (1, 5, 6); (1, 5, 9); (1, 6, 9); (1, 7, 8); (2, 4, 8); (2, 5, 7); (2, 6, 7); (2, 7, 9); (3, 4, 5); (3, 4, 6); (3, 4, 9); (5, 6, 9); (5, 7, 8); (6, 7, 8); (7, 8, 9);

Note: Here we only show the **positions** (0-indexed) in each trio.

Time Limit:	0.6 sec(s) for each input file.
Memory Limit:	256 MB
Source Limit:	1024 KB
Marking Scheme:	Marks are awarded when all the testcases pass.
Allowed Languages:	C, C++, C++14, Clojure, C#, D, Erlang, F#, Go, Groovy, Haskell, Java, Java 8, JavaScript(Rhino), JavaScript(Node.js), Julia, Kotlin, Lisp, Lisp (SBCL), Lua, Objective-C, OCaml, Octave, Pascal, Perl, PHP, Python, Python 3, R(RScript), Racket, Ruby, Rust, Scala, Swift, Visual Basic

CODE EDITOR

Enter your code or Upload your code as file.