Maximise Sum

Problem Statement

You are given an array of size *N* and another integer *M*. Your target is to find the maximum value of sum of subarray modulo M.

Subarray is a continous subset of array elements.

Note that we need to find the maximum value of (Sum of Subarray)%M , where there are $N * (N+1)/2$ possible subarrays.

Input Format
First line contains T , number of test cases to follow. Each test case consists of exactly 2 lines. First line of each test case contain 2 space separated integers N and M, size of the array and modulo value M.
Second line contains N space separated integers representing the elements of the array.

Output Format
For every test case output the maximum value asked above in a newline.

Constraints
$2 \leq N \leq 10^5$
$1 \leq M \leq 10^{14}$
$1 \leq$ elements of the array $\leq 10^{18}$
2 ≤ Sum of N over all test cases ≤ 500000

Sample Input

```
1
5 7
3 3 9 9 5
```

Sample Output

```
6
```

Explanation

Max Possible Sum taking Modulo 7 is 6 , and we can get 6 by adding first and second element of the array