1068 – Investigation

An integer is divisible by 3 if the sum of its digits is also divisible by 3. For example, 3702 is divisible by 3 and 12 (3+7+0+2) is also divisible by 3. This property also holds for the integer 9.

In this problem, we will investigate this property for other integers.

Input

Input starts with an integer **T (≤ 200)**, denoting the number of test cases.

Each case contains three positive integers **A, B** and **K (1 ≤ A ≤ B < 2^{31} and 0 < K < 10000)**.

Output

For each case, output the case number and the number of integers in the range **[A, B]** which are divisible by **K** and the sum of its digits is also divisible by **K**.

Sample Input	Output for Sample Input
3 1 20 1 1 20 2 1 1000 4	Case 1: 20 Case 2: 5 Case 3: 64