

In the name of God.

INOI, Iranian National Olympiad in Informatics
Online Contest, April 2008
First Exam



Triples

Take the set $A = \{1, 2, \dots, n\}$. Given are m subsets of A , each consisting of three elements. We want to pick $\frac{n}{3}$ such subsets that partition A . In other words, we want any element in A to be included in the picked subsets, while none of them intersect.

Problem

This is an **Output-only** task. You are given several input files, for each of which, you are to generate the correct output file to submit. You can find the input files named `triples1.in`, `triples2.in`, `\dots`, `triples10.in` in a zip archive, in the *Download* section of the contest interface. Your task is to generate the output files `triples1.out`, `triples2.out`, `\dots`, `triples10.out`, put them in a folder and submit it in the form of an archive (zip or gzip).

Note that files 6a, 6b and 6c are all part of the 6th test case. Therefore, you will only secure their point if you solve the three of them correctly.

You don't need to put all the output files in the archive. Thus, if you cannot solve some test cases, just include those which you have solved.

Input Specification

The first line of the *Standard Input* contains two integers n and m separated by a whitespace. On the i^{th} of the next m lines, there are three integers a_i , b_i and c_i separated with whitespace. These show the elements in the set i .

Output Specification

If a test case doesn't have a solution, write `No` in the only line of the output. Otherwise, output `Yes` on the first line, and the number of picked subsets in the second line, separated with a space. These sets should form a partition of A .

Restrictions

- The subsets given in the input are all distinct. That is, no subset is repeated;
- Size of the submitted archive cannot exceed 100 Kilo Bytes;
- Since you should only submit the output files, your program need not take a little amount of time for all the test cases.

Example

triples0.in	triples0.out
6 5 6 4 1 2 4 6 2 5 3 6 5 1 4 3 6	Yes 3 1