1. **Judgement**

**Problem Description**

Judge true or false about the following sentences:

1. This is a boring problem.

2. You can be stronger without money.

3. Scramble egg with tomato should use salt but not sugar.

4. The 33th Mersenne prime number is 1257787

5. Bing search is the only search engine you can use all over the world.

6. The problem setter is stupid.

**Input**

There is no input for this problem.

**Output**

Output six lines. For each sentence if you think it's right output "YES", otherwise output "NO".

**B. Defence**

**Problem Description**

Dr.Boom has an advanced laboratory to product robots, he wants to destroy the earth using these robots. But someday the lab is attacked by the righteous people on earth. People come from south and east to attack Dr.Boom’s lab. At first, there are **A** robots in east and **B** robots in south. The east will suffer **a** damages pe**r** secondand the south will suffer **b** damages per second. Each robot can offset 1 damages. When any direction’s robot can’t offset the damages, the lab will be occupied. To protect the lab, Dr.Boom product **m** robots per second and these **m** robots can be assigned to south or east immediately. The robots is produced at first of each second, and we judge whether the lab has been occupied at the end of each second.

Please calculate how long the lab will be occupied, if the lab can’t be occupied, output "Niega"

**Input**

First line contains T (T ≤ 10) denoting the number of test cases.

T cases follow. For each case:

There are five integers A, B, a, b, m. (0≤A,B≤100,0≤a,b,m≤10)

**Output**

For each case output how long the laboratory will be occupied, otherwise output "Niega".

**Sample Input**

3

5 3 1 2 3

5 3 1 2 1

0 0 1 1 2

**Sample Output**

Niega

2

Niega

**Hint**

For the third sample, at the start of the first second, Dr.Boom produce 2 robots, one go to the south and another go to the east. Both directions will suffer 1 damages, so at the end of the first second, the robots in the two directions will decrease to 0, the lab can’t be occupied. Output "Niega".

**C. Tree Sum**

**Problem Description**

Given a tree with N nodes, each node has a value and each edge has a color. The permissible path is the path that all adjacent edges have different colors. The value of a path is the sum of all nodes in that path. Please calculate the sum of all permissible path.

**Input**

First line contains T (T ≤10) denoting the number of test cases.

T cases follows for each cases:

First line contains an integer N (N ≤ 100000)

The second line contains N integers Vi indicating the value of N nodes. (1 ≤Vi ≤100000)

Next N - 1 lines describe the N-1 edges of the tree, each line contains three integers x, y, z. x, y are the endpoints of the edge and z is the color of the edge. (1 ≤z ≤100000)

**Output**

For each case output the sum of all permissible path.

**Sample Input**

1

6

6 2 37 1 4

1 2 1

1 3 2

1 4 3

2 5 1

2 6 2

**Sample Output**

134

**Hint**

1-2 Value: 8

1-3 Value: 9

1-4 Value: 13

1-2-6 Value: 12

2-1-3 Value: 11

2-1-4 Value: 15

2-5 Value: 3

2-6 Value: 6

3-1-4 Value: 16

3-1-2-6 Value: 15

4-1-2-6 Value: 19

5-6 Value: 7

So, the sum is 134