

Day 65 coding Statement : New Tablet

Ajinkya decided to buy a new tablet. His budget is B , so he cannot buy a tablet whose price is greater than B . Other than that, he only has one criterion — the area of the tablet's screen should be as large as possible. Of course, the screen of a tablet is always a rectangle.

Ajinkya has visited some tablet shops and listed all of his options. In total, there are N available tablets, numbered 1 through N . For each valid i , the i -th tablet has width W_i , height H_i and price P_i .

Help Ajinkya choose a tablet which he should buy and find the area of such a tablet's screen, or determine that he cannot buy any tablet.

Input

The first line of the input contains a single integer T denoting the number of test cases. The description of T test cases follows.

The first line of each test case contains two space-separated integers N and B . N lines follow.

For each i ($1 \leq i \leq N$), the i -th of these lines contains three space-separated integers W_i , H_i and P_i .

Output

For each test case, print a single line. If Ajinkya cannot buy any tablet, it should contain the string "no tablet" (without quotes).

Otherwise, it should contain a single integer — the maximum area of the screen of a tablet Ajinkya can buy.

Sample Input 1

3

3 6

3 4 4

5 5 7

5 2 5

2 6

368

5 4 9

1 10

5 5 10

Sample Output 1

12

no tablet

25

Program:

```
package com.talentbattle.codingchallenge;
```

```
import java.util.Scanner;
```

```
public class NewTablet {
```

```
public static void main(String[] args) {
    // TODO Auto-generated method stub
    Scanner scan = new Scanner(System.in);
```

```
//input of test cases
int t = scan.nextInt();
```

```
while(t-->0)
```

```
//input of the available tablets and budget.
```

```
int n = scan.nextInt();
```

```
int b = scan.nextInt();
```

```
int size = 0;
```

```
for(int j=0;j<n;j++)
```

$$\{$$

```
//get the info. of tablet(width,height and price).
```

```
int w = scan.nextInt();
```

```
int h = scan.nextInt();
```

```
int p = scan.nextInt();
```

```
//if price less than or equal to budget continue.
```

```
if(p<= b)
```

 $\{$

```
//calculate the size of the tablet.
```

The screenshot shows the Eclipse IDE with the following components:

- Project Explorer:** Lists various Java files in the 'NewTablet.java' package, including 'Array_disjoint.java', 'Array_even_or_odd.java', 'Array_square.java', 'Array_type.java', 'ascii_output.java', 'BalancingWeight.java', 'BodyMassIndex.java', 'Brackets_remove.java', 'BucketFilling.java', 'ChessFormat.java', 'Concatenate_string.java', 'Count_in_strings.java', 'day1_vowel_consonant.java', 'days_in_a_month.java', 'Dot_product.java', 'Double_number.java', 'duplicate_element.java', 'Element_Array.java', 'Equal_arrays.java', 'EqualArray.java', 'factor.java', 'factorial.java', 'First_last_letter_capital.java', 'fraction.java', 'Frequency_string.java', 'GoldMining.java', 'GoodWeather.java', 'Handshakes.java', 'Longest_palindrome.java', 'Max_product.java', and 'NewTablet.java'.
- Code Editor:** Displays the code for 'NewTablet.java'. The code is as follows:


```

import java.util.*;

public class NewTablet {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        int t = sc.nextInt();
        while(t-->0)
        {
            //input of the available tablets and budget.
            int n = sc.nextInt();
            int b = sc.nextInt();
            int size = 0;

            for(int j=0;j<n;j++)
            {
                //get the info. of tablet(width,height and price).
                int w = sc.nextInt();
                int h = sc.nextInt();
                int p = sc.nextInt();

                //if price less than or equal to budget continue.
                if(p<= b)
                {
                    //calculate the size of the tablet.
                    if(w>h*size)
                    {
                        size=w*h;
                    }
                }
            }

            //if the size of tablet is greater than 0 print the size of tablet.
            if(size != 0)
            {
                System.out.println(size);
            }
            else
            {
                System.out.println("No tablet");
            }
        }
    }
}

```
- Console:** Shows the output of the program. The input '3 10 5 10 25' results in the output '3', indicating that 3 tablets can be bought within the budget.