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 Wi, height Hi and price Pi.

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≤i≤N), the i-th of these lines contains three space-separated integers Wi, Hi and Pi.

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

3 6 8

5 4 9

1 10

5 5 10

Sample Output 1

12

no tablet

25

C Program

```
#include <stdio.h>
int main(void) {
        int tc,i,j,n,b ;
        scanf("%d\n",&tc);
        while(tc--)
        {
          scanf("%d %d",&n,&b);
          int a[n][3],area = 0;

          for(i=0;i<n;i++)
          {
             for(j=0;j<3;j++)
             scanf("%d ",&a[i][j]);
          }
          for(i=0;i<n;i++)
          {
             if(a[i][2]<=b && (a[i][0] * a[i][1]) >=area)
             area = a[i][0] * a[i][1];
          }
          if(area==0)
            printf("no tablet\n");

          else
```

```
            printf("%d\n",area);
        }
        return 0;
}
```

C++ Program

```
#include <iostream>
using namespace std;
int main() {
    int t;
    cin>>t;
    while(t--)
    {
      int n,b;
      cin>>n>>b;
      int max=-1;
      for(int i=0;i<n;i++)
      {
        int width,height,price;
        cin>>width>>height>>price;
        int area=width*height;
        if(price<=b)
        {
          if(area>max)
           max=area;
        }
      }
     if(max==-1)
```

```
            cout<<"no tablet\n";
            else
            cout<<max<<"\n";
          }
         return 0;
}
```

Java

```
import java.util.*;
import java.lang.*;
import java.io.*;
class Main
{
        public static void main (String[] args) throws java.lang.Exception
        {
                Scanner scanner = new Scanner(System.in);
    int t = scanner.nextInt();
    while (t-->0) {
      int n = scanner.nextInt();
      int b = scanner.nextInt();
      int size = 0;

      for (int j = 0; j < n; j++) {
        int w = scanner.nextInt();
        int h = scanner.nextInt();
        int p = scanner.nextInt();

        if (p <= b) {
          if (w * h > size) {
```

```
                size = w * h;
              }
            }
          }
          if (size!=0){
            System.out.println(size);
          }else {
            System.out.println("no tablet");
          }

        }
          }
}
```

Python

```
t=int(input())
for A in range(t):
    n,b=map(int,input().split(" "))
    dict={}
    for x in range(n):
        w,h,i=map(int,input().split(" "))
        dict[w*h]=i
    dd=sorted(dict)
    #print(dd)
    for x in range(len(dd)-1,-1,-1):
        m=dict[dd[x]]
        if m<=b:
            print(dd[x])
            break
```

```
else:
    print("no tablet")
```