UW ACM-ICPC

Qualifier

10/11/14

Google

6512 Assignments

When Starfleet headquarters gets a request for an exploration expedition, they need to determine which ship from those currently docked in the docking bay to send. They decide to send whichever ship is currently able to make the expedition based on how much fuel is currently stored on the ship as well as how long it will take the ship to arrive at the expected destination. Due to the age and current maintenance of the ships, each ship travels at a different top speed and has a different fuel consumption rate. Each ship reaches its top speed instantaneously.

Input

Input begins with a line with one integer T ($1 \leq T \leq 50$) denoting the number of test cases. Each test case begins with a line with two space-separated integers N and D, where N ($1 \leq N \leq 100$) denotes the number of ships in the docking bay and D ($1 \leq D \leq 10^6$) denotes the distance in light-years to the expedition site. Next follow N lines with three space-separated integers v_i, f_i, and c_i, where v_i ($1 \leq v_i \leq 1000$) denotes the top speed of ship i in light-years per hour, f_i ($1 \leq f_i \leq 1000$) denotes the fuel on ship i in kilos of deuterium, and c_i ($1 \leq c_i \leq 1000$) denotes the fuel consumption of ship i in kilos of deuterium per hour.

Output

For each test case, print a single integer on its own line denoting the number of ships capable of reaching the expedition site. Be careful with integer division!

Sample Input

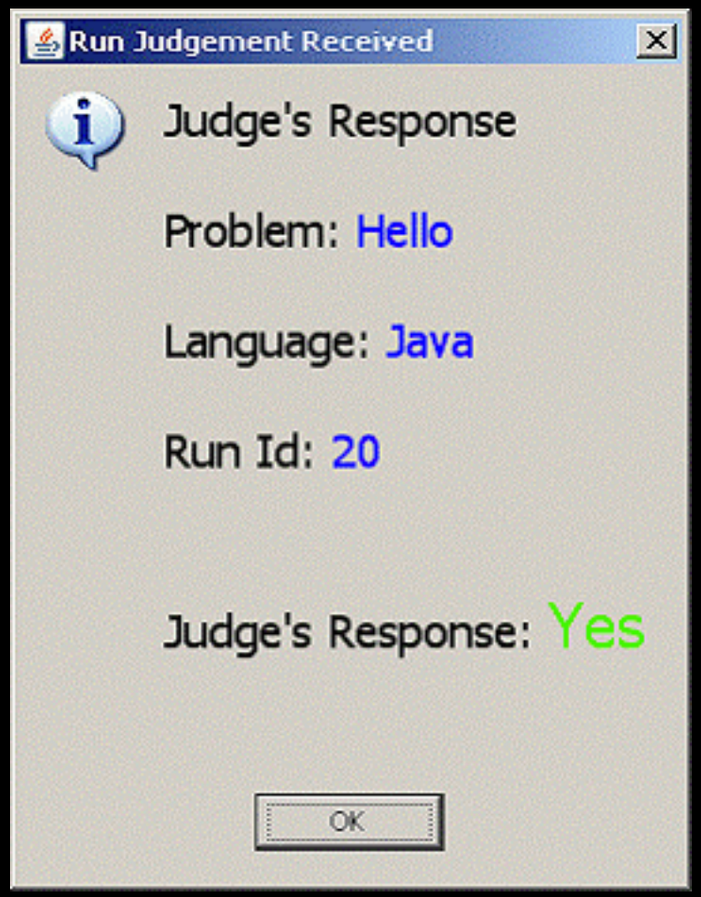
```
2
3 100
52 75 10
88 13 44
56 9 5
2 920368
950 950 1
943 976 1
```

Sample Output

```
2
1
```

```java
import java.util.*;
import java.io.*;

public class Main {
  public static void main(String[] args) {
    Scanner in = new Scanner(System.in);
    int cases = in.nextInt();
    for(int i=0;i<cases;i++) {
      int n = in.nextInt();
      int d = in.nextInt();
      int count = 0;
      for(int j=0;j<n;j++) {
        int v = in.nextInt();
        int f = in.nextInt();
        int c = in.nextInt();
        if((v*f)/c >= d) {
          count++;
        }
      }
      System.out.println(count);
    }
  }
}
```


Run Judgement Received
Judge's Response
Problem: Hello
Language: Java
Run Id: 20
Judge's Response: Yes
OK

No - Compilation Error

No - Runtime Exception

No - Time Limit Exceeded

No - Wrong Answer

No - See Contest Staff

C

C++

Java

Python*

	Problem A	Problem B	Problem C	Problem D	Total
Team 1	—	—	—	—	0 solved 0 mins
Team 2	—	—	—	—	0 solved 0 mins
Team 3	—	—	—	—	0 solved 0 mins

	Problem A	Problem B	Problem C	Problem D	Total
Team 3	—	—	Solved! 1 try 5 mins	—	1 solved 5 mins
Team 1	—	—	—	—	0 solved 0 mins
Team 2	—	—	—	—	0 solved 0 mins

	Problem A	Problem B	Problem C	Problem D	Total
Team 3	—	—	Solved! 1 try 5 mins	—	1 solved 5 mins
Team 2	Solved! 1 try 8 mins	—	—	—	1 solved 8 mins
Team 1	—	—	—	—	0 solved 0 mins

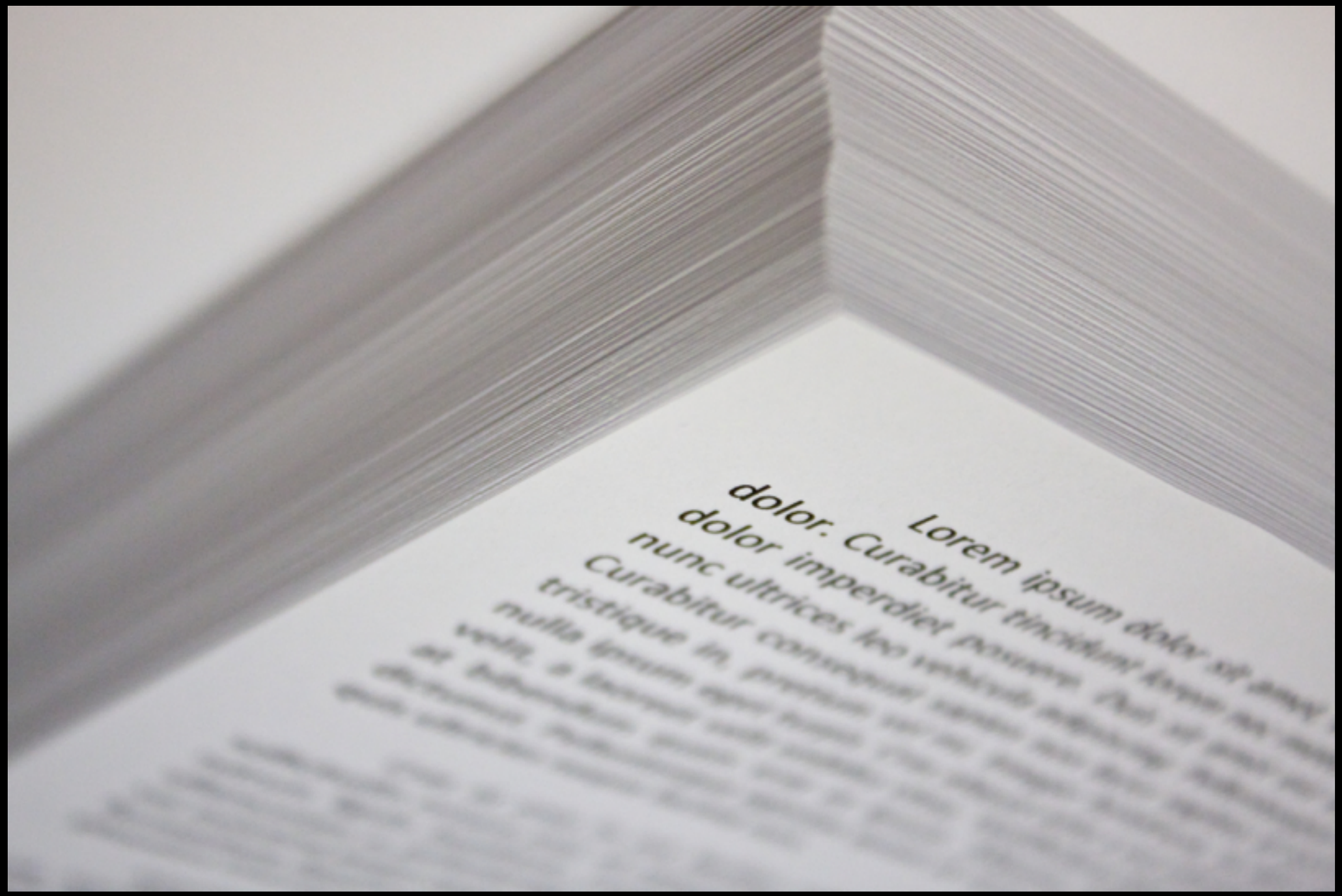
	Problem A	Problem B	Problem C	Problem D	Total
Team 3	—	—	Solved! 1 try 5 mins	—	1 solved 5 mins
Team 2	Solved! 1 try 8 mins	—	—	—	1 solved 8 mins
Team 1	—	—	Unsolved 1 try	—	0 solved 0 mins

	Problem A	Problem B	Problem C	Problem D	Total
Team 3	—	—	Solved! 1 try 5 mins	—	1 solved 5 mins
Team 2	Solved! 1 try 8 mins	—	—	—	1 solved 8 mins
Team 1	Solved! 1 try 14 mins	—	Unsolved 1 try	—	1 solved 14 mins

	Problem A	Problem B	Problem C	Problem D	Total
Team 1	Solved! 1 try 14 mins	—	Solved! 2 tries 18 mins	—	2 solved 14+18+20= 52 mins
Team 3	—	—	Solved! 1 try 5 mins	—	1 solved 5 mins
Team 2	Solved! 1 try 8 mins	—	—	—	1 solved 8 mins

Solving problems is good!

Guessing is bad, but only if you eventually figure out the solution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Password:
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docs.python.org/2/

cplusplus.com/reference/

docs.oracle.com/javase/7/docs/api

acm International Collegiate Programming Contest

IBM event sponsor

Pacific NW Region

Host a Contest! | Contest Rules | Registration | Contest Details | Results | Links

Welcome to the Pacific NW Region Programming Contest! The Pacific NW Region is comprised of the following areas: Alaska, Hawaii, British Columbia, Washington, Oregon, northern/central California and western Nevada. Because of the large geographic area of the region, the contest is held simultaneously at multiple sites: Northern California, Northwest (Oregon), Northeast (E. WA and Idaho), Puget Sound (Western Washington), Canada, and Hawaii.

Announcements

- **UPDATE: The 2014 contest will now be held on Saturday, November 15**.
- Registration will open October 1 once sponsorship has been obtained which will then establish the registration cost per team.
- As with the past few years, each school will be allowed up to 5 teams, space permitting.
- There will be two divisions this year!
  - Division 1 (D1) is for teams that are very strong algorithmically. The D1 problem set will be difficult. It will be along the lines of a lite version of what you would see at World Finals. Only D1 teams are eligible for slots in the World Finals.

ACM-ICPC World Finals

May 16 - 21

2015

Morocco

hosts Mohamed the Fifth University, Al Akhawayn University and Mundiapolis University

world finals
- Schedule
- Activities
- Local Information
- Teams
- World Finals Rules
- Video/Photo Coverage
- World Finals Results
- Past Problems
- Fact Sheet
- Prog. Environment

regionals
- Regional Finder
- Upcoming Regionals
- Regional Results
- Regional Rules
- Getting Involved
- Starting a Regional
- Free ACM Membership

compete
- Preparation
- Policies & Procedures
- FAQs
- The Problems

community
- IBM
- Upsilon Pi Epsilon
- ACM
- Fact Sheet
- History
- Contacts

Kellen Donohue

Cameron Neblett

Google

Schedule

- 9:45am: intro/rules
- 10:00am: practice problem
- 10:30am: full contest start
- 12:30pm: pizza delivery
- 3:30pm: contest finish
- 4:30pm: wrapped up

002

Java the Hutt
House Tyrell
TRIG
AMGEMS
weseepeasey
point free
Windows 9
House Greyjoy
Olia in UW
Team GHM
House Bolton
House Lannister
C--
the blue screens
The JJJ's
CAB-DDT
Fourth Place

006

House Aaryn
superluminal
Plain White Bread
Sparkle Motion
House Baratheon
3.98
PHD
THA PYTHONGS
Washington Redskins
The Dream Team
Eternal Flame
House Martell
0x5f3759df
Twerk Team
Here for the pizza
Mary, Kate, and Cachely