1376 - I2P CS 2017 Fall Chen Final Exam   Scoreboard (/contest/scoreboard/1376/)

Time

2018/01/08 15:30:00	Contest Ended	2018/01/08 19:20:00

Clarification

#	Problem	Asker	Description	Reply	Replier	Reply Time	For all team
1	11790 - Secret Letter	judgevllab	考試剩不到15分鐘囉~ 保握第一筆測資	真的是範測	judgevllab	2018/01/08 18:44:44	✔

Overview   Problem ▾

11777 - Final Exam - Problem C

Status (/status/?pid=11777) | Limits   Submit (/users/submit/11777)

Description

Problem C - Withdrawal

At the end of the semester, Roy Feng is bombarded (轟炸) by all kinds of final exams, reports, and projects. He regrets that he didn't make the course withdrawal at the middle of the semester.

According to the rule, without any underload application, freshmen should take at least 16 credits (學分) each semester after course withdrawal. Given all the courses Roy took at the begin of the semester, your task is to help Roy to figure out how many ways he can withdraw his courses to satisfy the above rule. Each way should withdraw at least one of them.

Input

The input consists of a single test case in the following format.

n

$s_1\ c_1$

$s_2\ c_2$

$...$

$...$

$s_n\ c_n$

The first line contains one integer n satisfying $1 \le n \le 20$. n denotes the total number of courses Roy took at the begin of the semester. The next n lines show the information of courses. The i-th line of them contains a string s_i whose length is between 1 and 100, inclusive, and an integer c_i satisfying $0 \le c_i \le 4$, meaning that the i-th course is taken by Roy with the name s_i and the credit c_i.

Output

Print the number of ways that Roy can withdraw his courses to meet the above condition.

Sample Input

Download (data:text/plain;charset=utf-8,10%0D%0ACollege_Chinese%202%0D%0AIntroduction_to_Programming(I)%203%0D%0AIntro_to_Computer_Systems_%26

```
10
College_Chinese 2
Introduction_to_Programming(I) 3
Intro_to_Computer_Systems_&_Applications 2
Discrete_Mathematics 3
Chinese_Herbology_and_Modern_Sciences_&_Technologies 3
English_I 2
Calculus_I 3
Physical_Education 0
General_Physics_B(I) 3
Service_Learning 0
```

Sample Output Download (data:text/plain;charset=utf-8,107%0D%0A)

```
107
```

Tags

Discuss