

TESTCASE 1:

≡ input.txt

```
1 7
2 p1,1,1,fdc1,2,hdc1,hdc3,1,fde1,2,hde2,hde4
3 p2,0.5,2,fdc1,fdc3,2,hdc1,hdc4,1,fde1,1,hde2
4 p3,1,2,fdc2,fdc4,1,hdc2,2,fde2,fde4,1,hde1
5 p4,1.5,2,fdc3,fdc2,1,hdc3,2,fde1,fde3,1,hde3
6 p5,1,1,fdc1,1,hdc2,1,fde4,1,hde2
7 p6,1.5,3,fdc1,fdc2,fdc3,0,0,1,hde1
8 p7,0.5,1,fdc3,1,hdc2,1,fde3,1,hde2
```

TESTCASE 2:

≡ input.txt

```
1 10
2 p1,1,1,fdc1,2,hdc1,hdc3,1,fde1,2,hde2,hde4
3 p2,0.5,2,fdc1,fdc3,2,hdc1,hdc4,1,fde1,1,hde2
4 p3,1,2,fdc2,fdc4,1,hdc2,2,fde2,fde4,1,hde1
5 p4,1.5,2,fdc3,fdc2,1,hdc3,2,fde1,fde3,1,hde3
6 p5,1,1,fdc1,1,hdc2,1,fde4,1,hde2
7 p6,1.5,3,fdc1,fdc2,fdc3,0,0,1,hde1
8 p7,0.5,1,fdc3,1,hdc2,1,fde3,1,hde2
9 p8,0.5,3,fdc4,fdc1,fdc3,3,hdc1,hdc2,hdc4,2,fde2,fde3,1,hde4
10 p9,1,1,fdc2,1,hdc3,1,fde4,1,hde1
11 p10,1.5,2,fdc1,fdc4,1,hdc2,2,fde3,fde4,1,hde2
12
```

TESTCASE 3:

≡ input.txt

```
1 20
2 p1,1,1,fdc1,2,hdc1,hdc3,1,fde1,2,hde2,hde4
3 p2,0.5,2,fdc1,fdc3,2,hdc1,hdc4,1,fde1,1,hde2
4 p3,1,2,fdc2,fdc4,1,hdc2,2,fde2,fde4,1,hde1
5 p4,1.5,2,fdc3,fdc2,1,hdc3,2,fde1,fde3,1,hde3
6 p5,1,1,fdc1,1,hdc2,1,fde4,1,hde2
7 p6,1.5,3,fdc1,fdc2,fdc3,0,0,1,hde1
8 p7,0.5,1,fdc3,1,hdc2,1,fde3,1,hde2
9 p8,0.5,3,fdc4,fdc1,fdc3,3,hdc1,hdc2,hdc4,2,fde2,fde3,1,hde4
10 p9,1,1,fdc2,1,hdc3,1,fde4,1,hde1
11 p10,1.5,2,fdc1,fdc4,1,hdc2,2,fde3,fde4,1,hde2
12 p11,1,2,fdc2,fdc4,1,hdc2,2,fde1,fde3,1,hde1
13 p12,1.5,1,fdc1,2,hdc3,hdc4,1,fde2,1,hde4
14 p13,0.5,3,fdc1,fdc3,fdc4,3,hdc2,hdc3,hdc4,2,fde3,fde4,1,hde1
15 p14,1,1,fdc2,2,hdc1,hdc3,1,fde2,1,hde3
16 p15,1.5,2,fdc1,fdc2,1,hdc2,2,fde4,fde1,1,hde2
17 p16,0.5,1,fdc3,1,hdc1,1,fde2,1,hde4
18 p17,1,2,fdc4,fdc1,1,hdc2,2,fde3,fde4,1,hde2
19 p18,1.5,2,fdc2,fdc3,1,hdc3,2,fde1,fde4,1,hde3
20 p19,1,1,fdc1,2,hdc2,hdc4,1,fde3,1,hde1
21 p20,0.5,3,fdc1,fdc2,fdc3,3,hdc1,hdc2,hdc4,2,fde2,fde3,1,hde4
22
```

TESTCASE 4:

≡ input.txt

```
1 50
2 p1,1,1,fdc5,2,hdc1,hdc3,1,fde7,2,hde2,hde4
3 p2,0.5,2,fdc10,fdc3,2,hdc5,hdc4,1,fde8,1,hde12
4 p3,1,2,fdc6,fdc14,1,hdc9,2,fde4,fde10,1,hde1
5 p4,1.5,2,fdc13,fdc6,1,hdc2,2,fde15,fde3,1,hde13
6 p5,1,1,fdc8,1,hdc9,1,fde12,1,hde5
7 p6,1.5,3,fdc1,fdc4,fdc7,0,0,1,hde8
8 p7,0.5,1,fdc15,1,hdc7,1,fde9,1,hde14
9 p8,0.5,3,fdc9,fdc1,fdc14,2,hdc5,hdc4,1,fde8,1,hde4
10 p9,1,1,fdc12,1,hdc3,1,fde14,1,hde1
11 p10,1.5,2,fdc3,fdc11,1,hdc6,2,fde13,fde10,1,hde2
12 p11,1,2,fdc2,fdc14,1,hdc3,2,fde12,fde4,1,hde1
13 p12,1.5,1,fdc6,2,hdc7,hdc9,1,fde5,1,hde9
14 p13,0.5,3,fdc9,fdc3,fdc14,2,hdc6,hdc7,2,fde3,fde4,1,hde11
15 p14,1,1,fdc5,2,hdc1,hdc2,1,fde12,1,hde8
16 p15,1.5,2,fdc8,fdc1,1,hdc4,2,fde14,fde1,1,hde10
17 p16,0.5,1,fdc12,1,hdc7,1,fde13,1,hde2
18 p17,1,2,fdc14,fdc5,1,hdc9,2,fde15,fde4,1,hde9
19 p18,1.5,2,fdc3,fdc11,1,hdc8,2,fde9,fde12,1,hde15
20 p19,1,1,fdc7,2,hdc5,hdc4,1,fde3,1,hde6
21 p20,0.5,3,fdc1,fdc14,fdc6,2,hdc9,hdc4,2,fde2,fde3,1,hde12
22 p21,1,2,fdc7,fdc9,1,hdc2,2,fde15,fde3,1,hde10
23 p22,1.5,1,fdc8,2,hdc5,hdc6,1,fde4,1,hde9
24 p23,0.5,2,fdc12,fdc8,1,hdc3,1,fde7,1,hde11
25 p24,1,1,fdc6,1,hdc4,1,fde7,1,hde8
26 p25,1.5,3,fdc11,fdc12,fdc13,0,0,1,hde10
27 p26,0.5,1,fdc13,1,hdc7,1,fde8,1,hde9
28 p27,1,2,fdc9,fdc5,1,hdc2,2,fde11,fde12,1,hde10
29 p28,1.5,2,fdc10,fdc15,1,hdc8,2,fde9,fde13,1,hde12
30 p29,1,1,fdc14,2,hdc5,hdc9,1,fde8,1,hde10
31 p30,0.5,3,fdc11,fdc14,fdc15,2,hdc3,hdc7,2,fde7,fde10,1,hde13
32 p31,1,1,fdc9,2,hdc6,hdc8,1,fde12,1,hde14
33 p32,1.5,2,fdc7,fdc13,1,hdc7,2,fde11,fde14,1,hde11
34 p33,0.5,2,fdc6,fdc15,1,hdc9,1,fde13,1,hde9
35 p34,1,3,fdc8,fdc10,fdc12,2,hdc4,hdc8,2,fde9,fde11,1,hde10
36 p35,1.5,1,fdc14,2,hdc5,hdc7,1,fde12,1,hde13
37 p36,0.5,2,fdc12,fdc14,1,hdc8,2,fde10,fde13,1,hde12
38 p37,1,1,fdc10,2,hdc5,hdc9,1,fde11,1,hde11
39 p38,1.5,3,fdc11,fdc13,fdc15,0,0,1,hde13
40 p39,1,1,fdc9,1,hdc6,1,fde12,1,hde14
41 p40,0.5,2,fdc14,fdc15,1,hdc4,2,fde11,fde13,1,hde9
42 p41,1,2,fdc7,fdc8,1,hdc5,2,fde10,fde12,1,hde11
43 p42,1.5,1,fdc10,2,hdc7,hdc9,1,fde13,1,hde12
44 p43,0.5,3,fdc12,fdc15,fdc11,3,hdc3,hdc6,hdc8,2,fde14,fde15,1,hde13
45 p44,1,1,fdc14,2,hdc5,hdc7,1,fde11,1,hde14
46 p45,1.5,2,fdc7,fdc10,1,hdc8,2,fde12,fde14,1,hde11
47 p46,0.5,2,fdc9,fdc14,2,hdc4,hdc9,2,fde10,fde13,1,hde12
48 p47,1,3,fdc11,fdc12,fdc15,2,hdc6,hdc8,2,fde9,fde11,1,hde14
49 p48,1.5,1,fdc8,2,hdc3,hdc7,1,fde12,1,hde11
50 p49,0.5,2,fdc15,fdc10,1,hdc9,2,fde13,fde14,1,hde13
51 p50,1,1,fdc9,1,hdc6,1,fde12,1,hde14
```

OUTPUT CASE 1:

≡ output.txt

1 Final Assignment of all the professors:

2 p1 is assigned the following:

3 | 1. Half a course of fdc1

4 | 2. Half a course of hdc1

5

6 p2 is assigned the following:

7 | 1. Half a course of hdc1

8

9 p3 is assigned the following:

10 | 1. Full course of fdc4

11

12 p4 is assigned the following:

13 | 1. Half a course of fdc2

14 | 2. Full course of hdc3

15

16 p5 is assigned the following:

17 | 1. Half a course of fdc1

18 | 2. Half a course of hdc2

19

20 p6 is assigned the following:

21 | 1. Half a course of fdc2

22 | 2. Full course of fdc3

23

24 p7 is assigned the following:

25 | 1. Half a course of hdc2

26

OUTPUT CASE 2:

≡ output.txt

```
1   Final Assignment of all the professors:
2   p1 is assigned the following:
3   |   1. Full course of hdc1
4
5   p2 is assigned the following:
6   |   1. Half a course of hdc4
7
8   p3 is assigned the following:
9   |   1. Full course of fde2
10
11  p4 is assigned the following:
12  |   1. Half a course of hdc3
13  |   2. Full course of fde1
14
15  p5 is assigned the following:
16  |   1. Half a course of fdc1
17  |   2. Half a course of hdc2
18
19  p6 is assigned the following:
20  |   1. Half a course of fdc2
21  |   2. Full course of fdc3
22
23  p7 is assigned the following:
24  |   1. Half a course of hdc2
25
26  p8 is assigned the following:
27  |   1. Half a course of hdc4
28
29  p9 is assigned the following:
30  |   1. Half a course of fdc2
31  |   2. Half a course of hdc3
32
33  p10 is assigned the following:
34  |   1. Half a course of fdc1
35  |   2. Full course of fdc4
36
```

OUTPUT CASE 3:

≡ output.txt

```
1 Final Assignment of all the professors:
2 p1 is assigned the following:
3 | 1. Full course of fdc1
4
5 p2 is assigned the following:
6 | 1. Half a course of hdc1
7
8 p3 is assigned the following:
9 | 1. Full course of fdc2
10
11 p4 is assigned the following:
12 | 1. Full course of fdc3
13 | 2. Half a course of hdc3
14
15 p5 is assigned the following:
16 | 1. Full course of hdc2
17
18 p6 is assigned the following:
19 | 1. Full course of hde1
20
21 p7 is assigned the following:
22 | 1. Half a course of fde3
23
24 p8 is assigned the following:
25 | 1. Half a course of fdc4
26
27 p9 is assigned the following:
28 | 1. Half a course of hdc3
29 | 2. Half a course of fde4
30
31 p10 is assigned the following:
32 | 1. Half a course of fde3
33 | 2. Full course of hde2
34
35 p11 is assigned the following:
36 | 1. Full course of fde1
37
38 p12 is assigned the following:
39 | 1. Full course of hdc4
40 | 2. Half a course of fde2
41
42 p14 is assigned the following:
43 | 1. Half a course of hdc1
44 | 2. Half a course of fde2
45
46 p15 is assigned the following:
47 | 1. Half a course of fde4
48
49 p16 is assigned the following:
50 | 1. Half a course of hde4
51
52 p17 is assigned the following:
53 | 1. Half a course of fdc4
54
55 p18 is assigned the following:
56 | 1. Full course of hde3
57
58 p20 is assigned the following:
59 | 1. Half a course of hde4
60
```

OUTPUT CASE 4:

≡ output.txt

```
1  p1 is assigned the following:
2  | 1. Full course of fde7
3
4  p2 is assigned the following:
5  | 1. Half a course of fdc3
6
7  p3 is assigned the following:
8  | 1. Full course of fdc6
9
10 p4 is assigned the following:
11 | 1. Half a course of fdc13
12 | 2. Full course of fde15
13
14 p5 is assigned the following:
15 | 1. Full course of hde5
16
17 p6 is assigned the following:
18 | 1. Half a course of fdc1
19 | 2. Full course of fdc4
20
21 p7 is assigned the following:
22 | 1. Half a course of fde9
23
24 p8 is assigned the following:
25
26 p9 is assigned the following:
27 | 1. Full course of hde1
28
29 p10 is assigned the following:
30 | 1. Half a course of fde13
31 | 2. Full course of hde2
32
33 p11 is assigned the following:
34 | 1. Full course of fdc2
35
36 p12 is assigned the following:
37 | 1. Full course of fde5
38 | 2. Half a course of hde9
39
40 p13 is assigned the following:
41 | 1. Half a course of fde3
42
43 p14 is assigned the following:
44 | 1. Full course of hdc1
45
```

```
45
46 p15 is assigned the following:
47 | 1. Half a course of fdc1
48 | 2. Full course of fde1
49
50 p16 is assigned the following:
51 | 1. Half a course of fdc12
52
53 p17 is assigned the following:
54 | 1. Full course of fdc5
55
56 p18 is assigned the following:
57 | 1. Half a course of fdc3
58 | 2. Full course of hde15
59
60 p19 is assigned the following:
61 | 1. Half a course of fde3
62
63 p20 is assigned the following:
64
65 p21 is assigned the following:
66 | 1. Full course of hdc2
67
68 p22 is assigned the following:
69 | 1. Half a course of hdc5
70 | 2. Full course of fde4
71
72 p23 is assigned the following:
73 | 1. Half a course of hde11
74
75 p24 is assigned the following:
76 | 1. Full course of hde8
77
78 p25 is assigned the following:
79 | 1. Full course of fdc11
80 | 2. Half a course of hde10
81
82 p26 is assigned the following:
83 | 1. Half a course of fde8
84
85 p27 is assigned the following:
86 | 1. Half a course of fdc9
87 | 2. Half a course of hde10
88
```


89 p28 is assigned the following:
90 | 1. Full course of fdc10
91 | 2. Half a course of fdc15
92
93 p29 is assigned the following:
94 | 1. Half a course of hdc9
95 | 2. Half a course of fde8
96
97 p30 is assigned the following:
98 | 1. Half a course of hdc3
99
100 p31 is assigned the following:
101 | 1. Half a course of hdc6
102 | 2. Half a course of fde12
103
104 p32 is assigned the following:
105 | 1. Half a course of fdc7
106 | 2. Full course of hdc7
107
108 p33 is assigned the following:
109 | 1. Half a course of hdc9
110
111 p34 is assigned the following:
112 | 1. Full course of hdc4
113
114 p35 is assigned the following:
115 | 1. Full course of fdc14
116 | 2. Half a course of fde12
117
118 p36 is assigned the following:
119 | 1. Half a course of hdc8
120
121 p37 is assigned the following:
122 | 1. Full course of fde11
123
124 p38 is assigned the following:
125 | 1. Half a course of fdc13
126 | 2. Full course of hde13
127
128 p39 is assigned the following:
129 | 1. Full course of hde14
130
131 p40 is assigned the following:
132 | 1. Half a course of hde9
133

133
134 p41 is assigned the following:
135 | 1. Half a course of fdc7
136 | 2. Half a course of fde10
137
138 p42 is assigned the following:
139 | 1. Half a course of fde13
140 | 2. Full course of hde12
141
142 p43 is assigned the following:
143 | 1. Half a course of fde14
144
145 p44 is assigned the following:
146 | 1. Half a course of hdc5
147
148 p45 is assigned the following:
149 | 1. Half a course of hdc8
150 | 2. Half a course of fde14
151 | 3. Half a course of hde11
152
153 p46 is assigned the following:
154 | 1. Half a course of fde10
155
156 p47 is assigned the following:
157 | 1. Half a course of fdc12
158 | 2. Half a course of fde9
159
160 p48 is assigned the following:
161 | 1. Full course of fdc8
162 | 2. Half a course of hdc3
163
164 p49 is assigned the following:
165 | 1. Half a course of fdc15
166
167 p50 is assigned the following:
168 | 1. Half a course of fdc9
169 | 2. Half a course of hdc6
170