Vprašanje 1

Pravilno Točk 1,00 od 1,00 Vprašanje z zastavico

Besedilo vprašanja

Napišite program za reševanje problema 0-1 nahrbtnika z algoritmom, ki smo si ga ogledali na vajah. Program na standardnem vhodu dobi najprej prostornino nahrbtnika w in število predmetov n, nato pa naj prebere še n parov (w, v), ki predstavljajo prostornine in vrednosti posameznih predmetov.

Na izhod programa po vsakem dodajanju predmeta izpišite perspektivne rešitve problema, urejene naraščajoče po prostornini.

For example:

```
Result
   Input
                  0: (0, 0)

1: (0, 0) (2, 2)

2: (0, 0) (2, 2)

3: (0, 0) (2, 2)

4: (0, 0) (2, 2)
         4
2 2
5 2
          4 0
          5
               3
9
                    0: (0,
                                     0)
          6
3 5
                             (0, 0)
1: (0, 0) (3, 5)
2: (0, 0) (3, 5)
3: (0, 0) (3, 5) (9, 10)
4: (0, 0) (3, 5) (9, 10)
5: (0, 0) (3, 5) (9, 10)
6: (0, 0) (3, 5) (9, 10)
          12 0
6 5
15 6
          14 4
Answer:(penalty regime: 0 %)
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
```

Pripombe

```
Expected
                                                                                                                                                                                                                                                                                                                                                                                                       Got
     Input
                                0: (0, 0)

1: (0, 0) (2, 2)

2: (0, 0) (2, 2)

3: (0, 0) (2, 2)

4: (0, 0) (2, 2)
                                                                                                                                                                                                                                                                                    0: (0, 0)

1: (0, 0) (2, 2)

2: (0, 0) (2, 2)

3: (0, 0) (2, 2)

4: (0, 0) (2, 2)
             4
             2 2
5 2
             4 0
             5 3
                                            (0, 0)
                                                                                                                                                                                                                                                                                     0: (0, 0)
                                              (0, 0)

1: (0, 0) (3, 5)

2: (0, 0) (3, 5)

3: (0, 0) (3, 5)

4: (0, 0) (3, 5)

5: (0, 0) (3, 5)

6: (0, 0) (3, 5)
                                                                                                                                                                                                                                                                                                  (0, 0)

1: (0, 0) (3, 5)

2: (0, 0) (3, 5)

3: (0, 0) (3, 5)

4: (0, 0) (3, 5)

5: (0, 0) (3, 5)

6: (0, 0) (3, 5)
              6
             3 5
             12 0
                                                                                                          (9, 10)
(9, 10)
(9, 10)
(9, 10)
                                                                                                                                                                                                                                                                                                                                                             (9, 10)
(9, 10)
(9, 10)
(9, 10)
             6 5
15 6
              10 7
              14 4
                                    (0, 0)

1: (0, 0)

2: (0, 0) (9, 12)

3: (0, 0) (9, 12)

4: (0, 0) (9, 12)

5: (0, 0) (9, 12)

6: (0, 0) (8, 1) (9, 12)

7: (0, 0) (4, 1) (9, 12)
                                                                                                                                                                                                                                                                                   0: (0, 0)

1: (0, 0)

2: (0, 0) (9, 12)

3: (0, 0) (9, 12)

4: (0, 0) (9, 12)

5: (0, 0) (9, 12)

6: (0, 0) (8, 1) (7: (0, 0) (4, 1) (
12
                                 0:
             7
             24 11
9 12
             11 10
             21 2
9 12
                                                                                                                                                                                                                                                                                                                           0) (8, 1) (9, 12)
0) (4, 1) (9, 12)
             8 1
             4 1
                                                                                                                                                                                                                                                                                                  (0, 0)

1: (0, 0)

2: (0, 0) (3, 7)

3: (0, 0) (1, 1) (3, 7) (4, 8)

4: (0, 0) (1, 1) (3, 7) (4, 8)

5: (0, 0) (1, 1) (3, 7) (4, 8)

6: (0, 0) (1, 1) (3, 7) (4, 8)

7: (0, 0) (1, 1) (3, 7) (4, 8)
                                                                                                                                                                                                                                                                                    0: (0,
1:
2:
                                                          0)
(0,
(0,
                                 0:
                                              1: (0, 0)

2: (0, 0)

3: (0, 0)

4: (0, 0)

5: (0, 0)
                                                                                (3, 7)

(1, 1) (3, 7) (4, 8)

(1, 1) (3, 7) (4, 8)

(1, 1) (3, 7) (4, 8)

(1, 1) (3, 7) (4, 8)

(1, 1) (3, 7) (4, 8)
              25 4
             3 7
1 1
             24 0
7 11
6 3
                                                                                                                                                             (7, 11) (8, 12) (10, 18) (11, 19) (7, 11) (8, 12) (10, 18) (11, 19) (7, 11) (8, 12) (10, 18) (11, 19)
                                                                                                                                                                                                                                                                                                                                                                                                                (7, 11) (8, 12) (10, 18) (11, 19) (7, 11) (8, 12) (10, 18) (11, 19) (7, 11) (8, 12) (10, 18) (11, 19)
                                                                        0)
```

```
Input
                                                                                                                                                                                                              Expected
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Got
14
                                                                                                                                                                                                                                                                                                                                                                                                                          0: (0, 0)
1: (0
2: (0
3: (0
                                                 0: (0, 0)
                    8
                                                                                       (0,
                                                                                                          0)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                (ø,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0)
                    22 2
                                                                    1: (0, 0)

2: (0, 0) (3, 1)

3: (0, 0) (3, 1) (11, 7) (14, 8)

4: (0, 0) (3, 1) (11, 7) (14, 8)

5: (0, 0) (3, 1) (11, 7) (14, 8)

6: (0, 0) (3, 14) (5, 15) (10, 26) (13, 27)

7: (0, 0) (3, 14) (6, 15) (10, 26) (13, 27)

8: (0, 0) (3, 14) (6, 15) (10, 26) (13, 27)
                                                                                                                                                                                                                                                                                                                                                                                                                                             1: (0, 0)

2: (0, 0) (3, 1)

3: (0, 0) (3, 1) (11, 7) (14, 8)

4: (0, 0) (3, 1) (11, 7) (14, 8)

5: (0, 0) (3, 1) (7, 12) (10, 13)

6: (0, 0) (3, 14) (6, 15) (10, 26) (13, 27)

7: (0, 0) (3, 14) (6, 15) (10, 26) (13, 27)

8: (0, 0) (3, 14) (6, 15) (10, 26) (13, 27)
                   3 1
11 7
                    13 1
                   3 14
26 7
                     25 1
                                                                                                                                                                                                                                                                                                                                                                                                                     0: (0, 0)

1: (0, 0)

2: (0, 0) (9, 11)

3: (0, 0) (9, 11)

4: (0, 0) (9, 11)

5: (0, 0) (9, 11)

6: (0, 0) (9, 11)

7: (0, 0) (9, 11)

8: (0, 0) (9, 11)

9: (0, 0) (7, 9) (9, 11)

10: (0, 0) (7, 9) (9, 11)
15
                                                                   (0, 0)
1: (0, 0)
2: (0, 0) (9, 11)
3: (0, 0) (9, 11)
4: (0, 0) (9, 11)
5: (0, 0) (9, 11)
6: (0, 0) (9, 11)
7: (0, 0) (9, 11)
8: (0, 0) (9, 11)
9: (0, 0) (7, 9) (9, 11)
10: (0, 0) (7, 9) (9, 11)
                     10
                   27 2
9 11
19 11
24 1
                   20 2
28 12
13 1
                    28 12
                   7 9
19 1
                                                              (0, 0)
1: (0, 0) (9, 6)
2: (0, 0) (9, 6)
3: (0, 0) (9, 6) (14, 15)
4: (0, 0) (9, 6) (14, 15)
5: (0, 0) (6, 14) (14, 15) (15, 20)
6: (0, 0) (6, 14) (14, 15) (15, 20)
7: (0, 0) (6, 14) (14, 15) (15, 20)
8: (0, 0) (6, 14) (14, 15) (15, 20)
9: (0, 0) (6, 14) (14, 15) (15, 20)
10: (0, 0) (6, 14) (14, 15) (15, 20)
11: (0, 0) (6, 14) (14, 15) (15, 20)
12: (0, 0) (6, 14) (14, 15) (15, 20)
13: (0, 0) (4, 1) (6, 14) (15, 15, 20)
                                                                                                                                                                                                                                                                                                                                                                                                                       0: (0, 0)

1: (0, 0) (9, 6)

2: (0, 0) (9, 6)

3: (0, 0) (9, 6) (14, 15)

4: (0, 0) (9, 6) (14, 15)

5: (0, 0) (6, 14) (14, 15) (15, 20)

6: (0, 0) (6, 14) (14, 15) (15, 20)

7: (0, 0) (6, 14) (14, 15) (15, 20)

8: (0, 0) (6, 14) (14, 15) (15, 20)

9: (0, 0) (6, 14) (14, 15) (15, 20)

10: (0, 0) (6, 14) (14, 15) (15, 20)

11: (0, 0) (6, 14) (14, 15) (15, 20)

11: (0, 0) (6, 14) (14, 15) (15, 20)

12: (0, 0) (6, 14) (14, 15) (15, 20)

13: (0, 0) (4, 1) (6, 14) (10, 15) (15, 20)
15
                    13
                     9 6
                   24 11
14 15
                     20 11
                    21 7
25 3
                     18 11
                   13 3
29 4
                    23 6
                    4 1
```

Passed all tests!

Question author's solution (Java):

```
1 2 3 4 4 5 5 6 6 7 7 8 9 9 10 11 12 12 13 14 15 15 16 17 18 19 20 21 22 22 22
```

Pravilno

Točke za ta prispevek: 1,00/1,00