



CSES Problem Set

Elevator Rides

TASK | SUBMIT | RESULTS | STATISTICS | HACKING

Submission details

_Task:	Elevator Rides
Sender:	seleneal1996
Submission time:	2021-11-26 06:43:40
Language:	C++17
Status:	READY
Result:	ACCEPTED

Test results ▲

test	verdict	time	
#1	ACCEPTED	0.01 s	<u>>></u>
#2	ACCEPTED	0.01 s	<u>>></u>
#3	ACCEPTED	0.01 s	<u>>></u>
#4	ACCEPTED	0.01 s	<u>>></u>
#5	ACCEPTED	0.01 s	<u>>></u>
#6	ACCEPTED	0.14 s	<u>>></u>
#7	ACCEPTED	0.14 s	<u>>></u>
#8	ACCEPTED	0.14 s	<u>>></u>
#9	ACCEPTED	0.14 s	<u>>></u>
#10	ACCEPTED	0.14 s	<u>>></u>
#11	ACCEPTED	0.14 s	<u>>></u>
#12	ACCEPTED	0.14 s	<u>>></u>
#13	ACCEPTED	0.14 s	<u>>></u>
#14	ACCEPTED	0.15 s	<u>>></u>
#15	ACCEPTED	0.14 s	<u>>></u>
#16	ACCEPTED	0.14 s	<u>>></u>
#17	ACCEPTED	0.14 s	<u>>></u>
#18	ACCEPTED	0.14 s	<u>>></u>
#19	ACCEPTED	0.14 s	<u>>></u>
#20	ACCEPTED	0.15 s	<u>>></u>
#21	ACCEPTED	0.01 s	<u>>></u>
#22	ACCEPTED	0.14 s	<u>>></u>
#23	ACCEPTED	0.13 s	<u>>></u>
#24	ACCEPTED	0.12 s	<u>>></u>
#25	ACCEPTED	0.01 s	<u>>></u>

Dynamic Programming

Money Sums

Removal Game

Two Sets II

Increasing Subsequence

Projects

Elevator Rides

Counting Tilings

Counting Numbers

Your submissions

2021-11-26 06:43:40	✓	
2021-11-26 06:24:17	X	

test	verdict	time	
#26	ACCEPTED	0.13 s	<u>>></u>
#27	ACCEPTED	0.13 s	<u>>></u>
#28	ACCEPTED	0.12 s	<u>>></u>
#29	ACCEPTED	0.14 s	<u>>></u>
#30	ACCEPTED	0.01 s	<u>>></u>
#31	ACCEPTED	0.01 s	<u>>></u>
#32	ACCEPTED	0.12 s	<u>>></u>
#33	ACCEPTED	0.12 s	<u>>></u>
#34	ACCEPTED	0.01 s	<u>>></u>
#35	ACCEPTED	0.12 s	<u>>></u>
#36	ACCEPTED	0.15 s	<u>>></u>
#37	ACCEPTED	0.12 s	<u>>></u>
#38	ACCEPTED	0.01 s	<u>>></u>

Code -

```
//https://cses.fi/problemset/task/1653
   #include <bits/stdc++.h>
 3
   class ElevatorRides{
   public:
 4
 5
     void Solve(int n,int k)
 6
 7
       int a[n];
 8
        for (int i = 0; i < n; i++)
 9
          std::cin>>a[i];
       std::pair<int, int> dp[1<<n];</pre>
10
11
       dp[0] = \{0, k+1\};
12
       for (int s = 1; s < (1 << n); s++)
13
14
          dp[s] = \{25, 0\};
            for (int i = 0; i < n; i++)
15
16
17
              if (s>>i&1)
18
19
                auto [c, w] = dp[s^{(i<i)}];
20
                if (w + a[i] > k)
21
22
                  C++;
23
                  w = fmin(a[i], w);
24
                }
25
                else
26
                     w += a[i];
27
                dp[s] = min(dp[s], \{c, w\});
28
              }
29
            }
30
31
       std::cout<<dp[(1<<n)-1].first;
32
33
   };
34
35
   int main()
36
37
     std::ios base::sync with stdio(false);
38
     std::cin.tie(0);
39
     ElevatorRides S1= ElevatorRides();
40
     int n,k;
```

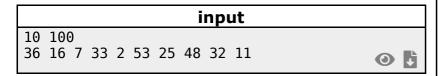
```
41 std::cin>>n>>k;
42 S1.Solve(n,k);
43 return 0;
44 }
```

Share code to others

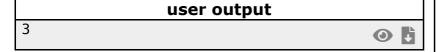
Test details ▲

Test 1

Verdict: ACCEPTED

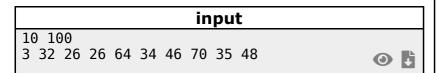


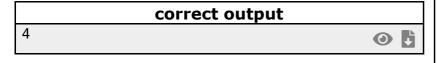


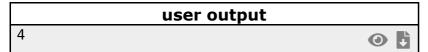


Test 2

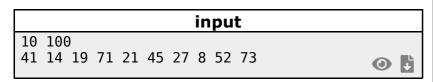
Verdict: ACCEPTED

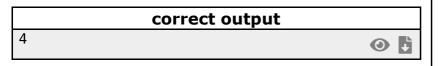


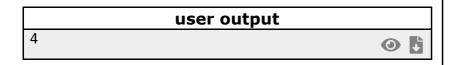




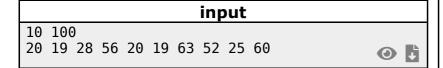
Test 3



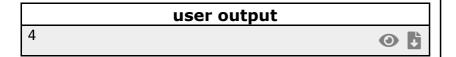




Verdict: ACCEPTED

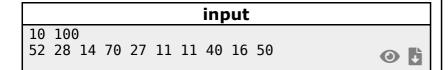


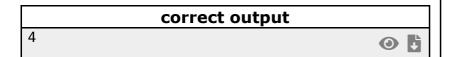


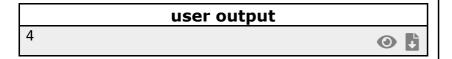


Test 5

Verdict: ACCEPTED







Test 6

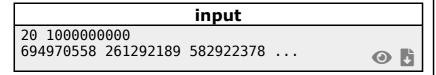


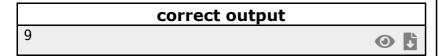
	correct output	
14		()

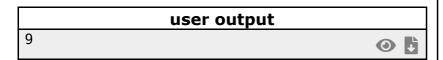
user o	utput
14	



Verdict: ACCEPTED





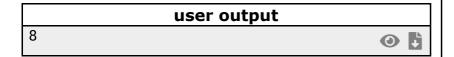


Test 8

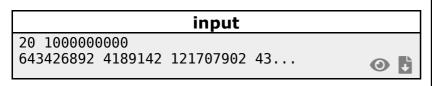
Verdict: ACCEPTED

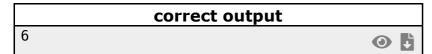






Test 9

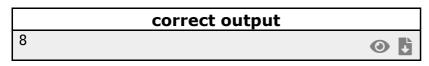


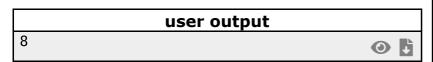


user out	tput
6	O

Verdict: ACCEPTED

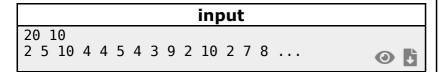
	input	
20 1000000000		
556514452 654521001	282817505	 O

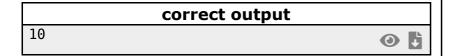




Test 11

Verdict: ACCEPTED

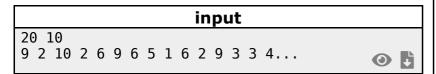


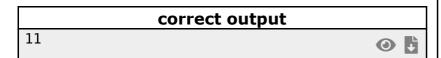


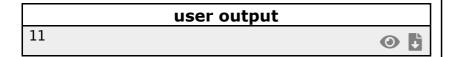
	user output	
10		0

Test 12

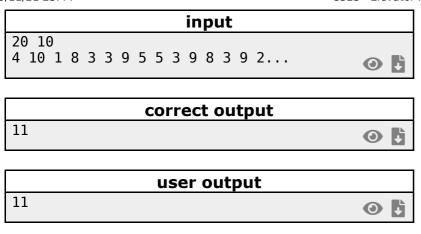
Verdict: ACCEPTED



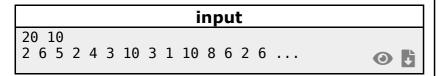


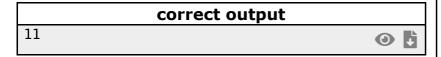


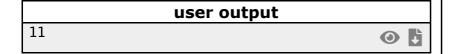
Test 13



Test 14

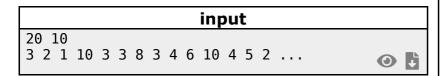






Test 15

Verdict: ACCEPTED

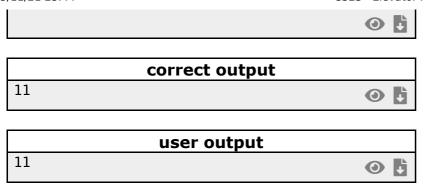




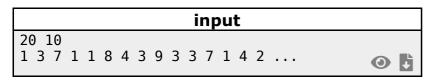


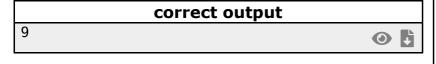
Test 16

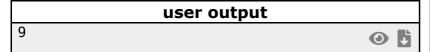
	input														
2	0)]	L0												
7		3	9	9	9	10	2	4	3	2	3	3	4	10	



Test 17

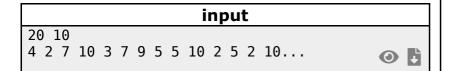


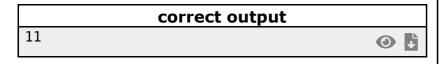


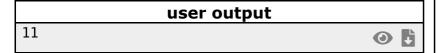


Test 18

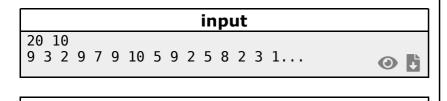
Verdict: ACCEPTED

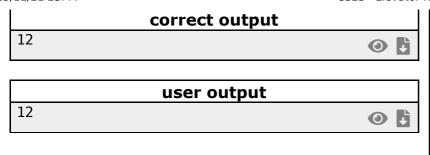




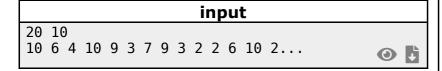


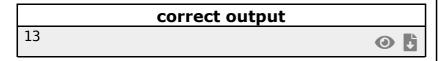
Test 19

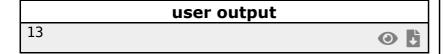




Test 20

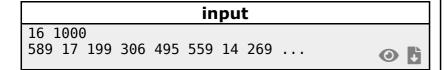


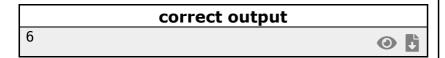




Test 21

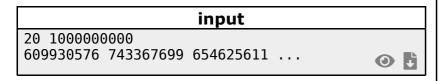
Verdict: ACCEPTED



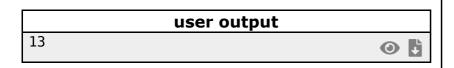


	user output
6	0 b

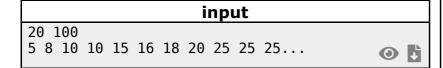
Test 22

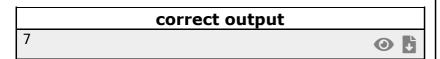


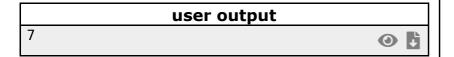
	correct output	
13		O



Verdict: ACCEPTED

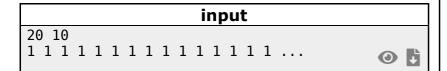


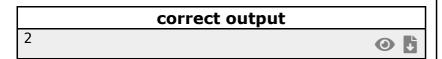


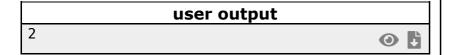


Test 24

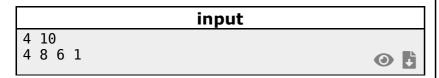
Verdict: ACCEPTED

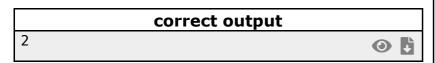






Test 25

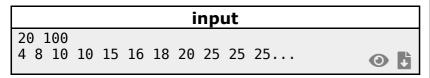


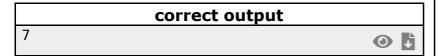


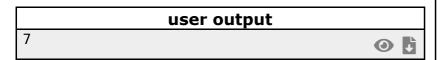
	user output
2	



Verdict: ACCEPTED

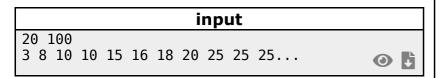




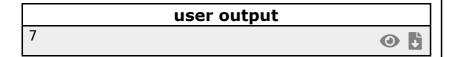


Test 27

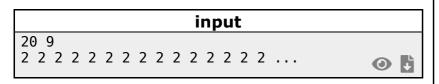
Verdict: ACCEPTED



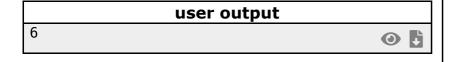




Test 28

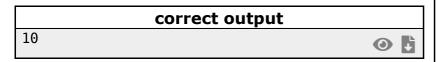


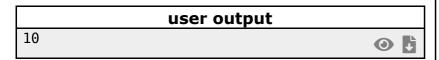




Verdict: ACCEPTED

							inp	ut				
20	100											
41	42	43	44	45	46	47	48	49	59		0	+





Test 30

Verdict: ACCEPTED



	correct output	
1	•	4μ

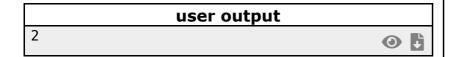
	user output	
1		0

Test 31

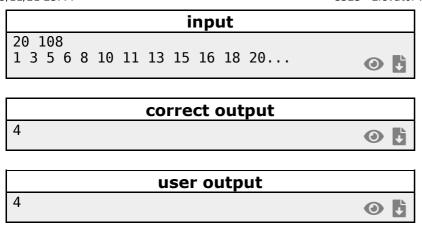
Verdict: ACCEPTED

input	
2 2	
2 2	O

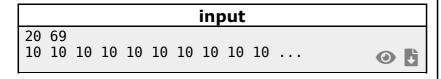


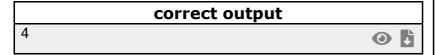


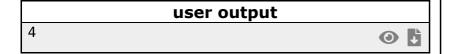
Test 32



Test 33

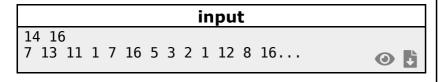






Test 34

Verdict: ACCEPTED

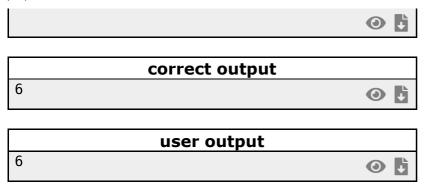




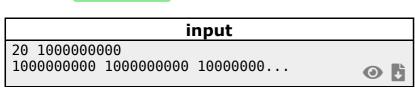


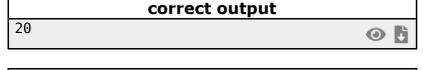
Test 35

	input
20 900000000	
207900850 208829300	203125674



Verdict: ACCEPTED

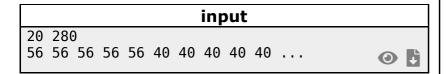


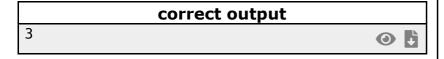


	user output	
20		

Test 37

Verdict: ACCEPTED





	user output	
3		0

Test 38

