## CSES Problem Set

# Rectangle Cutting



### Submission details

| | |
|---|---|
| Task: | Rectangle Cutting |
| Sender: | seleneal1996 |
| Submission time: | 2021-11-26 05:30:06 |
| Language: | C++11 |
| Status: | READY |
| Result: | ACCEPTED |

### Test results

| test | verdict | time | |
|---|---|---|---|
| #1 | ACCEPTED | 0.01 s | » |
| #2 | ACCEPTED | 0.01 s | » |
| #3 | ACCEPTED | 0.01 s | » |
| #4 | ACCEPTED | 0.01 s | » |
| #5 | ACCEPTED | 0.01 s | » |
| #6 | ACCEPTED | 0.30 s | » |
| #7 | ACCEPTED | 0.18 s | » |
| #8 | ACCEPTED | 0.04 s | » |
| #9 | ACCEPTED | 0.15 s | » |
| #10 | ACCEPTED | 0.01 s | » |
| #11 | ACCEPTED | 0.14 s | » |
| #12 | ACCEPTED | 0.07 s | » |
| #13 | ACCEPTED | 0.28 s | » |
| #14 | ACCEPTED | 0.01 s | » |
| #15 | ACCEPTED | 0.03 s | » |
| #16 | ACCEPTED | 0.23 s | » |
| #17 | ACCEPTED | 0.01 s | » |
| #18 | ACCEPTED | 0.08 s | » |
| #19 | ACCEPTED | 0.04 s | » |
| #20 | ACCEPTED | 0.91 s | » |
| #21 | ACCEPTED | 0.90 s | » |
| #22 | ACCEPTED | 0.01 s | » |
| #23 | ACCEPTED | 0.01 s | » |
| #24 | ACCEPTED | 0.23 s | » |
| #25 | ACCEPTED | 0.03 s | » |

### Dynamic Programming

...

- Array Description –
- Counting Towers –
- Edit Distance –
- Rectangle Cutting ✓
- Money Sums –
- Removal Game –
- Two Sets II –
- Increasing Subsequence –

...

### Your submissions

- 2021-11-26 05:30:06 ✓
- 2021-11-26 05:17:34 ✗

| test | verdict | time | |
|---|---|---|---|
| #26 | ACCEPTED | 0.91 s | » |

## Code

```cpp
  //https://cses.fi/problemset/task/1744
#include <bits/stdc++.h>
class RectangleCutting{
public:
  int Solve(int a,int b){
    int dp[a+1][b+1];
    for(int h=1;h<=a;h++)
    {
      for(int w=1;w<=b;w++)
      {
        if(h==w)
          dp[h][w]=0;
        else
        {
          int ans=1e8;
          for(int i=1;i<w;i++)
            ans=fmin(ans,1+dp[h][w-i]+dp[h][i
          for(int i=1;i<h;i++)
            ans=fmin(ans,1+dp[h-i][w]+dp[i][w
          dp[h][w]=ans;
        }
      }
    }
    return dp[a][b];
  }
};

int main()
{
  std::ios_base::sync_with_stdio(false);
  std::cin.tie(0);
  RectangleCutting S1=RectangleCutting();
  long long t;
  t=1;
  while(t--){
    int a,b;
    std::cin>>a>>b;
    std::cout<<S1.Solve(a,b);
  }
  return 0;
}
```

Share code to others

## Test details

### Test 1

Verdict: ACCEPTED

| input |
|---|
| 2 8 |

| correct output |
|---|

3

| user output |
| --- |
| 3 |

### Test 2

Verdict: ACCEPTED

| input |
| --- |
| 4 4 |

| correct output |
| --- |
| 0 |

| user output |
| --- |
| 0 |

### Test 3

Verdict: ACCEPTED

| input |
| --- |
| 1 4 |

| correct output |
| --- |
| 3 |

| user output |
| --- |
| 3 |

### Test 4

Verdict: ACCEPTED

| input |
| --- |
| 5 8 |

| correct output |
| --- |
| 4 |

| user output |
| --- |
| 4 |

### Test 5

Verdict: ACCEPTED

| input |
| --- |
| 5 10 |

| correct output |
| --- |
| 1 |

| user output |
| --- |
| 1 |

### Test 6

Verdict: ACCEPTED

| input |
| --- |
| 404 288 |

| correct output |
| --- |
| 10 |

| user output |
| --- |
| 10 |

### Test 7

Verdict: ACCEPTED

| input |
| --- |
| 349 234 |

| correct output |
| --- |
| 13 |

| user output |
| --- |
| 13 |

### Test 8

Verdict: ACCEPTED

| input |
| --- |
| 180 137 |

| correct output |
| --- |
| 12 |

| user output |
| --- |
| 12 |

### Test 9

Verdict: ACCEPTED

| input |
| --- |
| 201 348 |

| correct output |
| --- |
| 10 |

| user output |
| --- |
| 10 |

### Test 10

Verdict: ACCEPTED

| input |
| --- |
| 127 36 |

| correct output |
| --- |
| 11 |

| user output |
| --- |
| 11 |

### Test 11

Verdict: ACCEPTED

| input |
| --- |
| 159 399 |

| correct output |
| --- |

10

| user output |
| --- |
| 10 |

### Test 12

Verdict: ACCEPTED

| input |
| --- |
| 136 284 |

| correct output |
| --- |
| 9 |

| user output |
| --- |
| 9 |

### Test 13

Verdict: ACCEPTED

| input |
| --- |
| 415 270 |

| correct output |
| --- |
| 10 |

| user output |
| --- |
| 10 |

### Test 14

Verdict: ACCEPTED

| input |
| --- |
| 34 162 |

| correct output |
| --- |
| 11 |

| user output |
| --- |
| 11 |

### Test 15

Verdict: ACCEPTED

| input |
| --- |
| 81 229 |

| correct output |
| --- |
| 13 |

| user output |
| --- |
| 13 |

### Test 16

Verdict: ACCEPTED

| input |
| --- |
| 297 336 |

| correct output |
| --- |
| 11 |

| user output |
| --- |
| 11 |

### Test 17

Verdict: ACCEPTED

| input |
| --- |
| 132 46 |

| correct output |
| --- |
| 9 |

| user output |
| --- |
| 9 |

### Test 18

Verdict: ACCEPTED

| input |
| --- |
| 425 94 |

| correct output |
| --- |
| 14 |

| user output |
| --- |
| 14 |

### Test 19

Verdict: ACCEPTED

| input |
| --- |
| 216 114 |

| correct output |
| --- |
| 10 |

| user output |
| --- |
| 10 |

### Test 20

Verdict: ACCEPTED

| input |
| --- |
| 499 500 |

| correct output |
| --- |
| 15 |

| user output |
| --- |
| 15 |

### Test 21

Verdict: ACCEPTED

| input |
| --- |
| 500 499 |

| correct output |
| --- |

15

| user output |
| --- |
| 15 |

### Test 22

Verdict: ACCEPTED

| input |
| --- |
| 1 500 |

| correct output |
| --- |
| 499 |

| user output |
| --- |
| 499 |

### Test 23

Verdict: ACCEPTED

| input |
| --- |
| 1 1 |

| correct output |
| --- |
| 0 |

| user output |
| --- |
| 0 |

### Test 24

Verdict: ACCEPTED

| input |
| --- |
| 425 225 |

| correct output |
| --- |
| 7 |

| user output |
| --- |
| 7 |

### Test 25

Verdict: ACCEPTED

| input |
| --- |
| 218 91 |

| correct output |
| --- |
| 11 |

| user output |
| --- |
| 11 |

### Test 26

Verdict: ACCEPTED

| input |
| --- |
| 500 500 |

| correct output |
| --- |
| 0 |

| user output |
| --- |
| 0 |