

Analysis of Naive Linjat Solver

5 rows, 4 columns \Rightarrow 20 cells.

7 intervals, total length 19

2			
2		2	3
		3	
	4		
	3		

Problem

A Solution

Algorithm: $R = \# \text{ of rows} = 5$

$C = \# \text{ of cols} = 4$

$I = \# \text{ of intervals} = 7$

1. $u \sim U[1, 7]$

pick a random interval out of $\{1, 2, 3, 4, 5, 6, 7\}$ without replacement.

2. Toss a coin with prob p ($p = \frac{1}{2} = \text{fair coin}$
 $p \neq \frac{1}{2}$, biased)

If heads, vertical fill

If tails, horizontal fill

3. Interval of length n has n possibilities.

3			
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	3		
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		3	
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$n=3$

} pick one of n possibilities, as long as its inside matrix.

4. If cells empty, fill. Else, replace u in U .

iterate
k times
($k=100$)