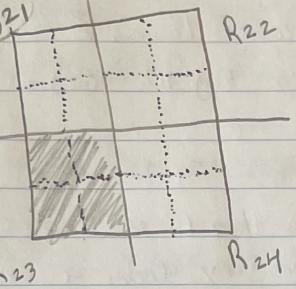


R_{21}

CSE107 - HW5

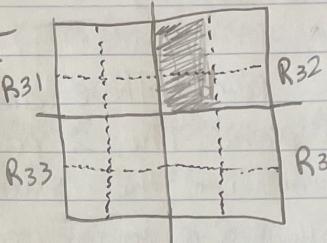
10.39; R_{21}



R_{22}

- $Q(R_{21}) = Q(R_{22}) = Q(R_{23}) = Q(R_{24}) = \text{True}$
- No further splitting needed; merge

R_{31}



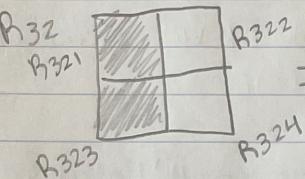
• $Q(R_{31}) = \text{False}$

• $Q(R_{31}) = Q(R_{33}) = Q(R_{34}) = \text{True}$

• $Q(R_{32}) = \text{False}$

We would split R_{32} from it

• R_{32}



R_{321}

R_{322}

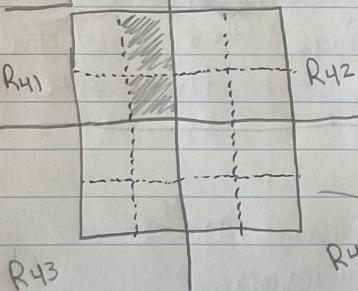
R_{323}

R_{324}

\Rightarrow From splitting it now, $Q(R_{32}) = \text{True}$

- No further splitting needed, Merge

R_{41}

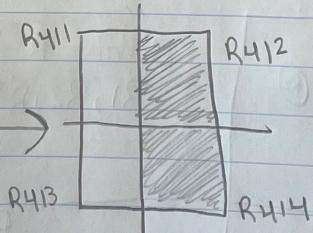


R_{44}

• $Q(R_{41}) = \text{false}$ \Rightarrow Split

• $Q(R_{42}) = Q(R_{43}) = Q(R_{44}) = \text{True}$

• $Q(R_{41}) = \text{false}$



$\Rightarrow Q(R_{32}) = \text{True} \Rightarrow \text{Merge}$

- 10.43; - The steps are continued as $g(x)$, no. of steps required = 8 (given)
line $T(i)$, $C(i)$ and $g(i)$; the horizontal steps can be removed from 1st step

