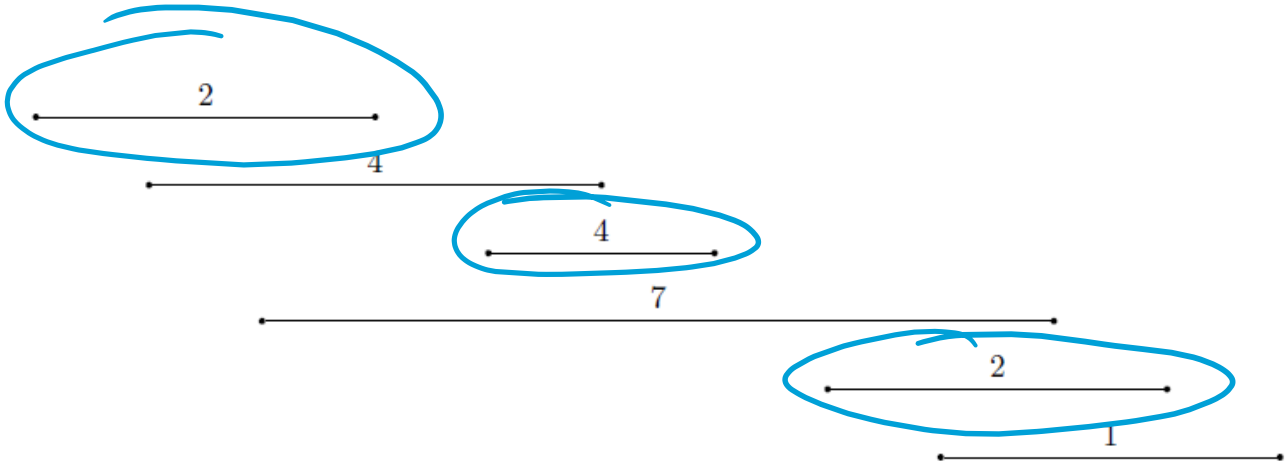
interval selected are the ones circled



2.

for i = 1...n do

// we can do binary search here since it is sorted by finish time

binary search for j in interval $[1 \dots (i-1)]$ with latest finish time f_j such that $f_j \leq s_i$

if such j is found then

p[i] = j

else

p[i] = 0

By doing binary search for j, the overall time complexity of this algorithm is $O(n \log n)$