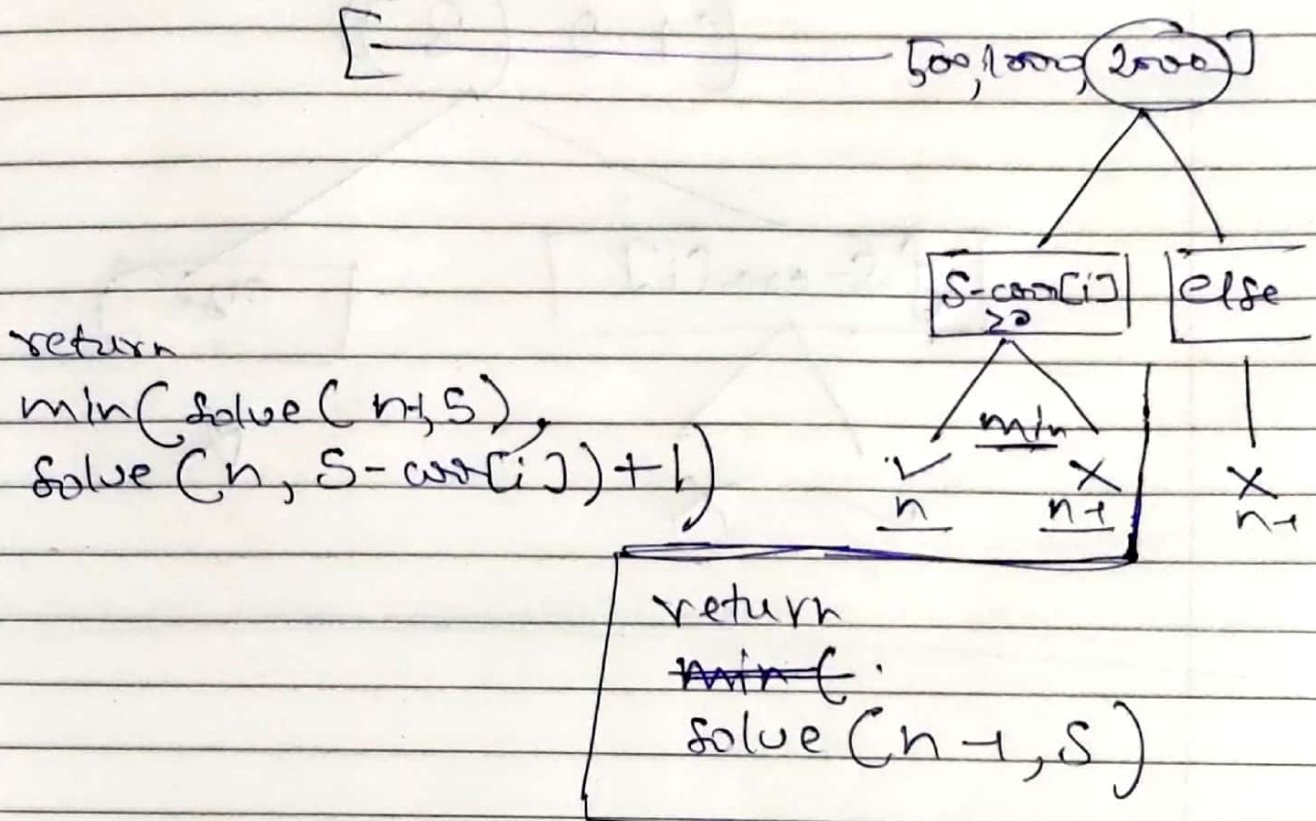


minimum no of coins

coins = [1 2 5 10 20 50 100 200 500 1000 2000]

S = 43

choice diagram



Base Cases

$n / \text{coins} \rightarrow 0$
 $S \rightarrow 0$

if $S = 0$:
 return 0

if $n \geq 20$:
 return float('inf')