Greedy Approach

Basically trynna be Greedy Ex #1 is best way to look at it.

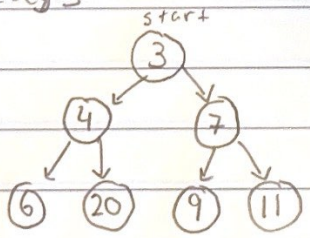
Ex 1) per 1 got inifte # of $20, $10, $5 bills
per 2 ask for $35, in least amount of bills

↳ to solve this greedy we would do by picking out the biggest bills by doing a $20 bill, $10 bill, and a $5 bill.

pros to greedy → Simple, and easy to implement

cons → Very often doesn't provide globally optimal solution

ex #2: (find the largest root to leaf sum)
[greedy]



So using greedy we would do (3)→(7) first since its the biggest then, (7)→(11) for a total of 3+7+11 = 10+11 = 21.

So this NOT globally optimal solution Since if we go from (3)→(4), then (4)→(20) we get 3+4+20 = 27. which is greater than 21.

Use greedy properly

1) Make locally optimal choices at each step
2) They may involve backtracking to reach optimal solutions
3) They are easy to implement, but harder to prove correct for a given problem.