

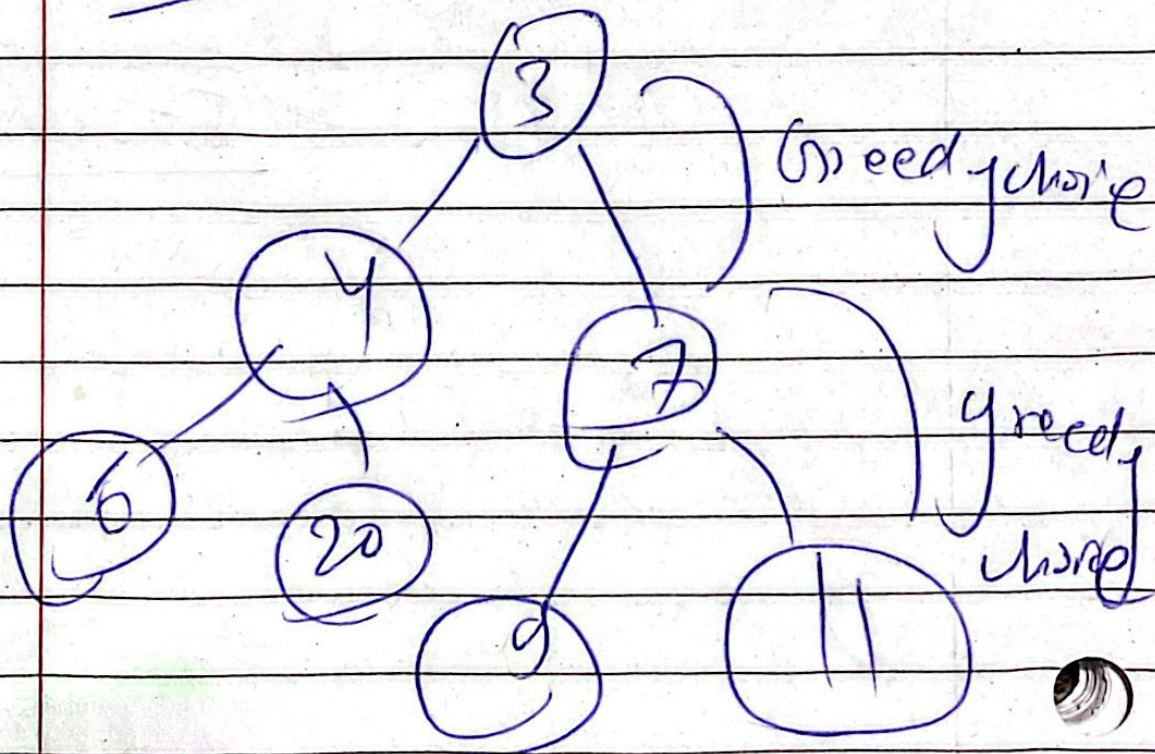
Greedy Algorithm

→ tries to find locally optimum choice at each stage in hope to finding a global optimum.

Pros: Simple, easy to implement, not fast

Cons: often don't get global optimum

Problem find max



When to use?

(1) Greedy choice property

- Global optimum can be reached
via local optimum

(2) Optimal substructure

- optimal solⁿ to problem contains
an optimal solⁿ to subproblem

- Never reconsider its choice,
unlike dynamic programming

- for optimization (requires min value
or max value)

- feasible solⁿ - satisfies the condⁿ
constraint of the problem

Optimization Problem

when we need a maximum
or minimum value