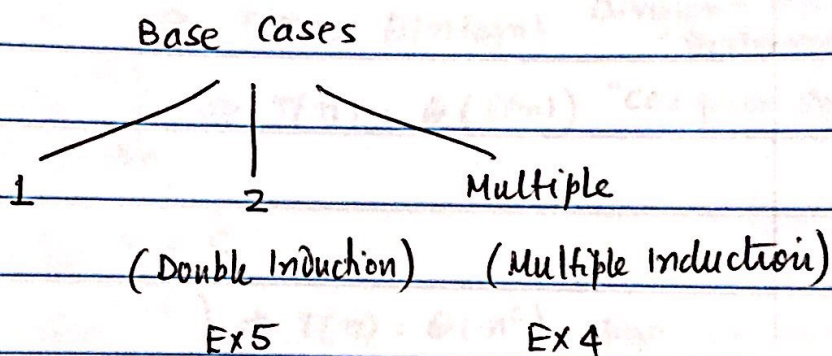
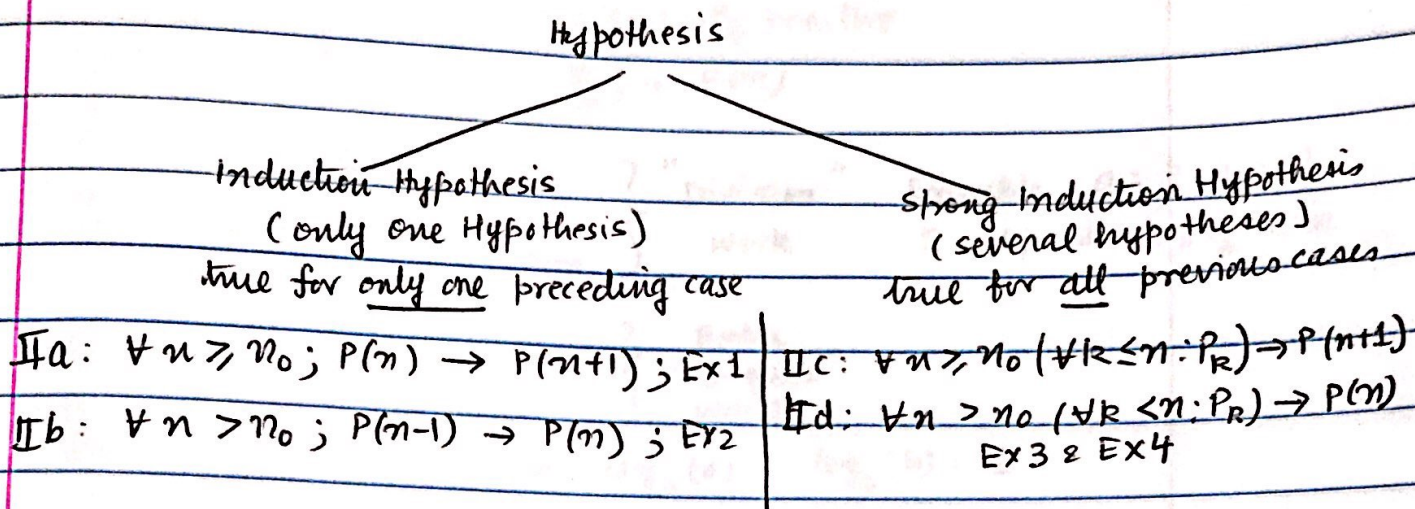


Mathematical Induction

comes in many flavors



Recurrence Equations

Recursion Tree or Iteration Method

- Basic / Fundamental Method to Solve Recurrences
- Also used to prove Master's Theorem
- can be used to solve recurrences, not covered by Master's Theorem

Example: $T(n) = 2T(\frac{n}{2}) + n \log n$

- can be used (+ other methods) to prove extension of Master's Theorem (Advanced HW)

Review Examples 1, 2, 3 of Handout