Recursion



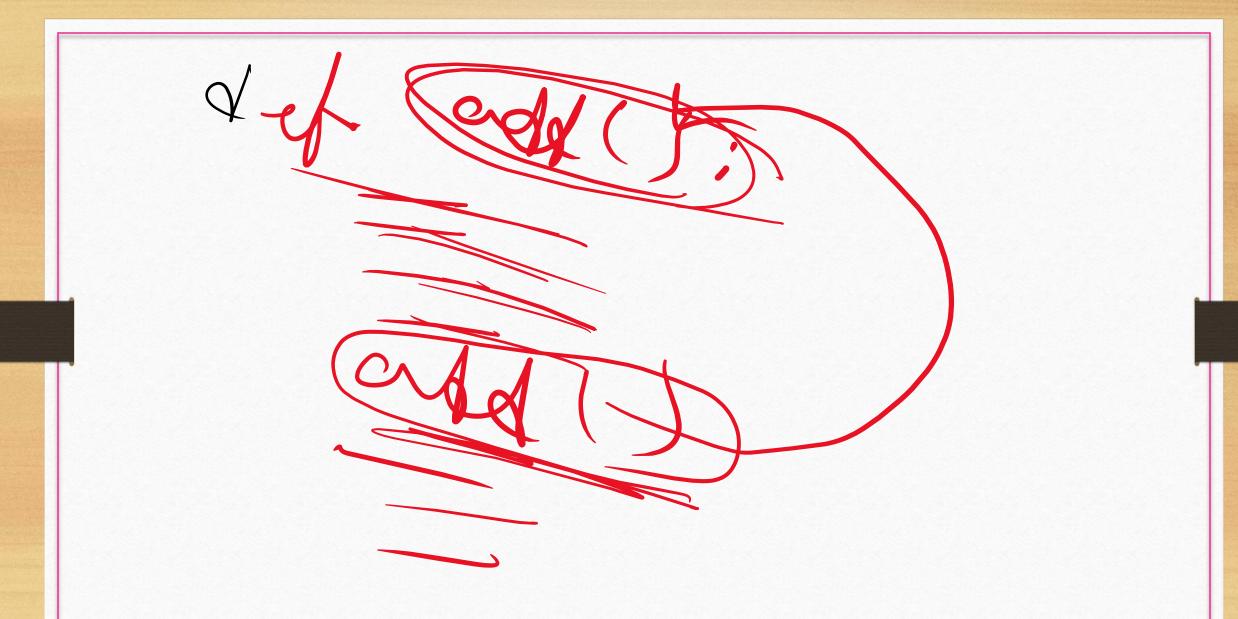
Mohammad Tasin (Tasin Coder)

Agenda

- What is Recursion
- > Recursion Tree
- > Approach to recursive solution

What is Recursion

- Function calling itself is called recursion
- A recursive method solves a problem by calling a copy of itself to work on a smaller problem
- It is important to ensure that the recursion terminates
- Recursive code is generally shorter and easier to write then iterative code



Recursion Tree

def PrintN(n):
 if n>0:
 print(n, end=' ')
 PrintN(n-1)

PrintN(3)

def PrintN(n):
if n>0:
print(n, end=' ')
PrintN(n-1)

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print(n, end='')
PrintN(n-1)

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 print(n, end=' ')
 PrintN(n-1)

Approach to recursive solution

