

14. Write C programs that demonstrate the mathematical analysis of non-recursive and recursive algorithms.

Program:

Non-recursive algorithm analysis

def non_recursive_analysis(n):

for i in range(n):

print(i)

Recursive algorithm analysis

def recursive_analysis(n):

if n > 0:

print(n)

recursive_analysis(n-1)

Demonstrate non-recursive algorithm analysis

non_recursive_analysis(5)

Demonstrate recursive algorithm analysis

recursive_analysis(5)

Output:

