

DATA STRUCTURES & ALGORITHMS

#04

Recursion

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| Student Name: |
| Roll Number: Section: |
| Work submitted on: |

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| **Maximum Marks** | **Performance** | **Viva** | **Total** |
| **Marks Obtained** |  |  |  |
| **Remarks (if any)** |  | | |
|  | | | |
| **Experiment evaluated by** | | | |
| Instructor Name: | | | |
| Signature: | | | |

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| Tasks |

Note: for every question you have to answer three questions before starting code

How many parameters recursive function will take?

What exactly function will do?

What will be the base case?

Task 1

Write a program in java to print the first 50 natural numbers using recursion

Task 2

Write a program in java to calculate the sum of numbers from 1 to n using recursion

Task 3

Write a program in java to print the array elements using recursion.

Task 4

Write a program in java to count the digits of a given number using recursion.

Task 5

Write a program in java to find the sum of digits of a number using recursion

Task 6

Write a program in java to get the largest element of an array using recursion.

Task 7

Write a program in java to reverse a string using recursion.