

# Programming, Data Structures And Algorithms Using Python - Week 3

...

Pratyush V. Talreja

# Contents covered in Week 3 lectures:

- Manipulating lists
- Arrays vs Lists
- Binary Search
- Matrices
- Selection Sort
- Insertion Sort
- Recursion

# Program 1

Q. Write a Program to print fibonacci series using Recursion.

Input: 5

Output: 0, 1, 1, 2, 3

# Program 2

Write a program to transpose the given matrix.

Input: 1 2 3

4 5 6

2 3 3

Output: 1 4 2

2 5 3

3 6 3

# Program 3

Write a program to find the second maximum element in the list

Input: [3, 4, 1, 2, 5, 6]

Output: 5