

NPTEL Video Lecture Topic List - Created by LinuXpert Systems, Chennai

NPTEL Video Course - Computer Science and Engineering - NOC:Programming, Data Structures and Algorithms in Python

Subject Co-ordinator - Prof. Madhavan Mukund

Co-ordinating Institute - Chennai Mathematical Institute

Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable

Lecture 1 - Lecture 1 - Algorithms and programming
Lecture 2 - Lecture 2 - Improving naive gcd
Lecture 3 - Lecture 3 - Euclid's algorithm for gcd
Lecture 4 - Lecture 4 - Downloading and installing Python
Lecture 5 - Lecture 1 - Assignment statement, basic types - int, float, bool
Lecture 6 - Lecture 2 - Strings
Lecture 7 - Lecture 3 - Lists
Lecture 8 - Lecture 4 - Control Flow
Lecture 9 - Lecture 5 - Functions
Lecture 10 - Lecture 6 - Examples
Lecture 11 - Lecture 1 - More about range()
Lecture 12 - Lecture 2 - Manipulating lists
Lecture 13 - Lecture 3 - Breaking out of a loop
Lecture 14 - Lecture 4 - Arrays vs lists, binary search
Lecture 15 - Lecture 5 - Efficiency
Lecture 16 - Lecture 6 - Selection Sort
Lecture 17 - Lecture 7 - Insertion Sort
Lecture 18 - Lecture 8 - Recursion
Lecture 19 - Lecture 1 - Mergesort
Lecture 20 - Lecture 2 - Mergesort, analysis
Lecture 21 - Lecture 3 - Quicksort
Lecture 22 - Lecture 4 - Quicksort analysis
Lecture 23 - Lecture 5 - Tuples and dictionaries
Lecture 24 - Lecture 6 - Function definitions
Lecture 25 - Lecture 7 - List Comprehension
Lecture 26 - Lecture 1 - Exception Handling
Lecture 27 - Lecture 2 - Standard input and output
Lecture 28 - Lecture 3 - Handling files
Lecture 29 - Lecture 4 - String functions

Get Digi-MAT (Digital Media Access Terminal) For High-Speed Video Streaming of NPTEL and Educational Video Courses in LAN

www.digimat.in

NPTEL Video Lecture Topic List - Created by LinuXpert Systems, Chennai

Lecture 30 - Lecture 5 - Formatting printed output
Lecture 31 - Lecture 6 - pass, del() and None
Lecture 32 - Lecture 1 - Backtracking, N queens
Lecture 33 - Lecture 2 - Global scope, nested functions
Lecture 34 - Lecture 3 - Generating permutations
Lecture 35 - Lecture 4 - Sets, stacks, queues
Lecture 36 - Lecture 5 - Priority queues and heaps
Lecture 37 - Lecture 1 - Abstract datatypes, classes and objects
Lecture 38 - Lecture 2 - Classes and objects in Python
Lecture 39 - Lecture 3 - User defined lists
Lecture 40 - Lecture 4 - Search trees
Lecture 41 - Lecture 1 - Memoization and dynamic programming
Lecture 42 - Lecture 2 - Grid paths
Lecture 43 - Lecture 3 - Longest common subsequence
Lecture 44 - Lecture 4 - Matrix multiplication
Lecture 45 - Lecture 5 - Wrap-up, Python vs other languages