



<https://lara.co.in>

CoreJavaBasics

1. JDK Setup
2. FirstProgram
3. Developmntstructure
4. JDK15andEclipse Setup
5. Programing elements
6. PrintinginCommandprompt
7. Localvariables
8. Unary Operators
9. Commandlinearguments
10. if block
11. nestedifblocks
12. ifblockswithunary operators
13. else block
14. if-elseblocksinsideifblock
15. if-elseblocks insideelseblock
16. if-elseblocks withunary operators
17. ternaryoperator
18. switch-cases
19. for-loop

<https://lara.co.in>

20. breakandcontinue
21. nestingofloops
22. labeledloops
23. for-eachloop
24. whileloop
25. do-while
26. Methods
27. attributes
28. SIB
29. IFRandMultipleclasses
30. Objectandreference variable
31. this keyword
32. constructors
33. constructoroverloadingandthis()
34. IIB
35. objectscount
36. Encapsulation
37. Inheritance
38. super()callingstatement
39. packages

<https://lara.co.in>

40. access levels
41. abstrctclasses
42. interfaces
43. methodoverloading
44. methodoverriding
45. autowidening
46. explicitnarrowing
47. autoupcasting
48. explicitdowncasting
49. achievingpolymorphism
50. final keyword
51. classpath
52. Javadoc,javapandjar commands
53. Scannerclass
54. Eclipse

CoreJavaAdvanced

1. Wrapperclassesbasics
2. autoboxingandautounboxing
3. whydowe requireException Handling

<https://lara.co.in>

4. try-catch
5. try-catches
6. try-catch-finally
7. exceptionalconditionsoffinally
8. returnstatement
9. Errors and Exceptions
10. CheckedandUnchecked
11. throws
12. throw
13. throwsin overriding
14. assertions
15. toString
16. equals
17. hashCode
18. GarbageCollectionandclone
19. reflectionapi
20. basics
21. advanced
22. annotations
23. static imports



<https://lara.co.in>

CoreJava

24. whydowerequiredaninner classes
25. nonstatic,staicandlocalinner classes
26. anaymousinner class
27. lambdaexpressions
28. basics
29. synchronization
30. threadlifecycle
31. accessories
32. basicsandimportantmethods
33. StringBuffer
34. Formatters
35. Regularexpressions
36. DateFormatersandNumberFormatters
37. arrays
38. introduction
39. basic operations
40. differentcollections
41. list
42. queues
43. avoidingduplicates(set)

<https://lara.co.in>

44. maps
45. iterators
46. sorting
47. TreeSetandTreeMap
48. sortingmapbasedonvalues
49. modifyingcollectionsclassesas synchronized
50. concurrentpackage
51. sortevenandoddseparately
52. basics
53. advanced
54. basics
55. readersandwriters
56. streams
57. serialization
58. advserializationandexternalization
59. PrintStream
60. serialVersionUID
61. forEach()methodinIterable interface.
62. defaultandstaticmethodsinInterfaces.
63. FunctionalInterfacesandLambda Expressions.

64. doublecolon(::)Operator

<https://lara.co.in> 65. ForEach indetailed

66. JavaStreams creation

67. JavaStreams Usage

68. Java IO improvements.

69. JavaDateandTimeAPI Improvement

70. CollectionAPIimprovements

71. ConcurrencyAPI improvements

❖ SQL:

❖ Downloading and installation of Oracle DataBase 11g ExpressEdition

❖ Downloading and installation of SQL developer

❖ Sql commands for table, sequence and procedures

➤ DDL

➤ DML

➤ DQL

❖ SQL Functions

❖ SQL without Constraints

❖ SQL with Constraints

➤ Not Null

➤ Unique

➤ Combination of not null and Unique

➤ Primary key

➤ Composite Key



CoreJava

- Composite Unique Key
 - Composite Primary Key
 - Foreign Key
- <https://lara.co.in>

- ❖ Foreign key relation ship
 - One to-one-relationship
 - One to-many-relationship
 - / Many-to-one relationship
 - Many-To-Many relationship



CoreJava

<https://lara.co.in>

- ❖ SQL JOINS
 - INNER-JOIN:
 - LEFT-OUTER-JOIN
 - RIGHT-OUTER-JOIN
 - FULL-OUTER-JOIN

In one-to-one, one-to-many and many-to-many mappings

- ❖ Date, TimeStamp, RowId, RowNum

LeetCode:



Java's DataStructures and Algorithms

Are you targeting to FAANG type of companies????

Do you want to rule the IT industry with the coding mania???

Do you want the package minimum 10 LPA as a fresher????

Do you want the salary jump to 5X?????

Do you want to learn the LeetCode and HackerRank challenges with an experienced faculty????

Please find the details

Class Timing : 9.00 PM to 6.00 PM

Class type : In-class

Course Content :



<https://lara.co.in>

Arrays :

<https://leetcode.com/problems/kth-largest-element-in-an-array/>

<https://leetcode.com/problems/neither-minimum-nor-maximum/>

<https://leetcode.com/problems/sort-colors/>

<https://leetcode.com/problems/missing-number/>

<https://leetcode.com/problems/maximum-product-of-three-numbers/>

<https://leetcode.com/problems/remove-duplicates-from-sorted-array/>

<https://takeuforward.org/data-structure/left-rotate-the-array-by-one/>

<https://leetcode.com/problems/rotate-array/>

<https://leetcode.com/problems/move-zeroes/>

<https://leetcode.com/problems/max-consecutive-ones/>

<https://leetcode.com/problems/rotate-image/>

<https://leetcode.com/problems/spiral-matrix/>

<https://leetcode.com/problems/spiral-matrix-ii/>

<https://leetcode.com/problems/best-time-to-buy-and-sell-stock>

Strings :

<https://leetcode.com/problems/valid-anagram/>

<https://leetcode.com/problems/reverse-string/>

<https://leetcode.com/problems/reverse-words-in-a-string/>

<https://leetcode.com/problems/valid-palindrome/>

<https://leetcode.com/problems/valid-palindrome-ii/>



<https://lara.co.in>

<https://leetcode.com/problems/consecutive-characters/>

<https://leetcode.com/problems/longest-common-prefix/>

HashMap & Sliding window technique :

<https://leetcode.com/problems/first-unique-character-in-a-string/>

<https://leetcode.com/problems/first-letter-to-appear-twice/>

<https://www.geeksforgeeks.org/counting-frequencies-of-array-elements/>

<https://leetcode.com/problems/sort-characters-by-frequency/>

<https://leetcode.com/problems/two-sum/>

<https://www.geeksforgeeks.org/find-a-pair-with-the-given-difference/>

<https://leetcode.com/problems/3sum/>

<https://leetcode.com/problems/intersection-of-two-arrays/>

<https://leetcode.com/problems/intersection-of-two-arrays-ii/>

<https://leetcode.com/problems/longest-substring-without-repeating-characters/>

<https://leetcode.com/problems/longest-substring-with-at-most-two-distinct-characters/>

<https://leetcode.com/problems/longest-substring-with-at-most-k-distinct-characters/>

<https://leetcode.com/problems/longest-repeating-character-replacement/>

<https://www.geeksforgeeks.org/find-if-there-is-a-subarray-with-0-sum/>

<https://leetcode.com/problems/subarray-sum-equals-k/>

<https://leetcode.com/problems/subarray-sums-divisible-by-k/>

<https://leetcode.com/problems/valid-anagram/>

<https://leetcode.com/problems/group-anagrams/>



CoreJava

<https://lara.co.in>

<https://leetcode.com/problems/max-consecutive-ones/>

<https://www.lintcode.com/problem/883/>

<https://leetcode.com/problems/max-consecutive-ones-iii/>

<https://leetcode.com/problems/lru-cache/>

<https://leetcode.com/problems/sliding-window-maximum/>

Stacks and Queues :

<https://www.geeksforgeeks.org/stack-data-structure/>

<https://www.javatpoint.com/ds-array-implementation-of-stack>

<https://leetcode.com/problems/valid-parentheses/>

<https://leetcode.com/problems/remove-all-adjacent-duplicates-in-string/>

<https://leetcode.com/problems/remove-all-adjacent-duplicates-in-string-ii/>

<https://leetcode.com/problems/removing-stars-from-a-string/>

<https://leetcode.com/problems/next-greater-element-i/>

<https://leetcode.com/problems/next-greater-element-ii/>

<https://leetcode.com/problems/daily-temperatures/>

<https://leetcode.com/problems/trapping-rain-water/>

<https://leetcode.com/problems/top-k-frequent-elements/>

<https://www.geeksforgeeks.org/queue-data-structure/>

<https://www.geeksforgeeks.org/array-implementation-of-queue-simple/>

<https://leetcode.com/problems/implement-queue-using-stacks>

<https://leetcode.com/problems/implement-stack-using-queues>



<https://lara.co.in>

<https://leetcode.com/problems/kth-largest-element-in-an-array/>

Sum of K largest elements

<https://takeuforward.org/data-structure/kth-largest-smallest-element-in-an-array/>

Sum of k minimum elements

Linked list :

<https://www.geeksforgeeks.org/search-an-element-in-a-linked-list-iterative-and-recursive/>

<https://www.geeksforgeeks.org/find-length-of-a-linked-list-iterative-and-recursive/>

<https://leetcode.com/problems/middle-of-the-linked-list>

<https://leetcode.com/problems/delete-the-middle-node-of-a-linked-list>

<https://leetcode.com/problems/merge-two-sorted-lists>

<https://leetcode.com/problems/palindrome-linked-list>

<https://leetcode.com/problems/remove-nth-node-from-end-of-list>

<https://leetcode.com/problems/remove-duplicates-from-sorted-list>

<https://leetcode.com/problems/remove-linked-list-elements>

<https://leetcode.com/problems/delete-node-in-a-linked-list>

<https://leetcode.com/problems/reverse-linked-list>

<https://leetcode.com/problems/swapping-nodes-in-a-linked-list>

<https://leetcode.com/problems/flatten-binary-tree-to-linked-list>

<https://leetcode.com/problems/odd-even-linked-list>

Recursion :

<https://www.geeksforgeeks.org/introduction-to-recursion-data-structure-and-algorithm->



[https://lara.co.in](https://lara.co.in/tutorials/)
[tutorials/](https://lara.co.in/tutorials/)

Print 1 to 10 using recursion

<https://www.geeksforgeeks.org/java-program-for-factorial-of-a-number/>

<https://www.geeksforgeeks.org/java-program-to-display-numbers-and-sum-of-first-n-natural-numbers/>

<https://leetcode.com/problems/fibonacci-number/>

<https://leetcode.com/problems/combinatorial-sum/>

<https://leetcode.com/problems/combinatorial-sum-ii/>

<https://leetcode.com/problems/subsets/>

<https://leetcode.com/problems/subsets-ii/>

Trees :

Binary tree :

https://takeuforward.org/data-structure/strivers-tree-series-tree-data-structure/#point_1

<https://leetcode.com/problems/binary-tree-preorder-traversal/>

<https://leetcode.com/problems/binary-tree-inorder-traversal/>

<https://leetcode.com/problems/binary-tree-postorder-traversal/>

<https://www.geeksforgeeks.org/search-a-node-in-binary-tree/>

<https://www.geeksforgeeks.org/sum-nodes-binary-tree/>

<https://leetcode.com/problems/second-minimum-node-in-a-binary-tree/>

<https://www.geeksforgeeks.org/find-maximum-or-minimum-in-binary-tree/>

<https://leetcode.com/problems/maximum-depth-of-binary-tree/>



CoreJava

<https://lara.co.in>

<https://leetcode.com/problems/balanced-binary-tree/>

<https://leetcode.com/problems/diameter-of-binary-tree/>

<https://leetcode.com/problems/same-tree/>

<https://leetcode.com/problems/symmetric-tree/>

<https://leetcode.com/problems/binary-tree-maximum-path-sum/>

<https://leetcode.com/problems/binary-tree-zigzag-level-order-traversal/>

<https://leetcode.com/problems/binary-tree-right-side-view/>

<https://www.geeksforgeeks.org/print-left-view-binary-tree/>

<https://leetcode.com/problems/lowest-common-ancestor-of-a-binary-tree/>

<https://leetcode.com/problems/construct-binary-tree-from-preorder-and-inorder-traversal/>

<https://leetcode.com/problems/construct-binary-tree-from-inorder-and-postorder-traversal/>

<https://leetcode.com/problems/binary-tree-level-order-traversal/>

<https://leetcode.com/problems/binary-tree-level-order-traversal-ii/>

<https://leetcode.com/problems/binary-tree-zigzag-level-order-traversal/>

Binary search tree :

<https://leetcode.com/problems/search-in-a-binary-search-tree/>

<https://practice.geeksforgeeks.org/problems/minimum-element-in-bst/1>

Maximum element in bst

<https://leetcode.com/problems/insert-into-a-binary-search-tree/>

<https://leetcode.com/problems/delete-node-in-a-bst/>

<https://leetcode.com/problems/range-sum-of-bst>



CoreJava

<https://lara.co.in>

<https://leetcode.com/problems/increasing-order-search-tree>

<https://leetcode.com/problems/kth-smallest-element-in-a-bst/>

<https://leetcode.com/problems/validate-binary-search-tree/>

<https://leetcode.com/problems/lowest-common-ancestor-of-a-binary-search-tree/>

<https://leetcode.com/problems/construct-binary-search-tree-from-preorder-traversal/>

<https://leetcode.com/problems/inorder-successor-in-bst/>

<https://leetcode.com/problems/two-sum-iv-input-is-a-bst/>

<https://leetcode.com/problems/balance-a-binary-search-tree>

Dynamic programming :

<https://leetcode.com/problems/climbing-stairs/>

<https://leetcode.com/problems/min-cost-climbing-stairs/>

<https://leetcode.com/problems/house-robber/>

<https://www.geeksforgeeks.org/0-1-knapsack-problem-dp-10/>

<https://leetcode.com/problems/coin-change/>

<https://leetcode.com/problems/coin-change-2/>

<https://leetcode.com/problems/unique-paths/>

<https://leetcode.com/problems/best-time-to-buy-and-sell-stock/>

<https://leetcode.com/problems/best-time-to-buy-and-sell-stock-ii/>

<https://leetcode.com/problems/best-time-to-buy-and-sell-stock-iii/description/>

<https://leetcode.com/problems/best-time-to-buy-and-sell-stock-iv/>

Binary Search :



CoreJava

<https://lara.co.in>

<https://www.geeksforgeeks.org/binary-search/>

<https://leetcode.com/problems/binary-search/>

<https://leetcode.com/problems/search-insert-position/>

<https://leetcode.com/problems/search-a-2d-matrix/>

<https://leetcode.com/problems/sqrtx/>

<https://leetcode.com/problems/find-first-and-last-position-of-element-in-sorted-array/>