Syllabus of Core Java

\rm All about Java

Java Appears , All about Bytecodes Features of Java , Java Environment Java Development Kit Java Platforms ,Java Virtual Machine ,Java API Java Programs

4 Installation Of JAVA

Getting and Installing Java, What about CLASSPATH?, Subfolders Created by JDK, Creating Source Files, Knowing Java's Reserved Words

Creating an Application

Line 1—public class App, Line 2—public static void main(String[] args), Line 3—System.out.println("Hello from Java!"); Compiling Code Cross Compilation options, Java Packages, Comments, Compilation of JAVA Code Import JAVA Classes, JAVA packages

HBasics Operations in JAVA

Variable declaration, variable initialization, static variable declaration, final variables, Scope with public private protected default, programs with concepts and scope of variable

we think for you

Hethods in JAVA

Method declaration, return type, scope of method, Method Overloading, Method Overriding, Data types in Method 10 programs on methods

4 Array String & Literals

Creating integer, Floating ,Boolean ,literals in JAVA, Various data Types , Type Casting , Declaring Array, Creating Arrays , 1D Array + Programs / Assignment

WAP to find Maximum value from arrayWAP to get the Average of ArrayWAP to perform SUM of all values of integer arrayWAP program to copy String Array from one to Another

Programs / Assignment
 How to compare String in JAVA
 How to remove a particular character in a String
 How to remove a substring inside a String by another one
 How to reverse a String
 Reverse a String
 How to search word inside String
 Split word into number of substring
 Covert String to Uppercase and LowerCase
 Match a region into a String
 Optimize String creation
 Format a String
 Get Unicode of String
 How to Buffer a String

4 Object Oriented Programming

Classes Objects Data Members Methods Inheritance Exception Handling Debugging

4 Inheritance with Class and Interface

What is inheritance, Types of Inheritance, extends & implements keywords, Subclass in inheritance, Access Specifiers and Inheritance

we think for you

Technologies

Creating Multilevel Inheritance, Overriding Methods, Accessing Overridden Members, Stopping Overriding with final, Stopping Inheritance with final, creating inner classes, Constructor Overriding

4 Programs/ Assignment WAP program for single inheritance WAP for multilevel inheritance WAP to work with Interface Inheritance from interface to class **Creating** interface Inheritance from interface WAP to perform working on interface WAP to overload & Override constructor

+ Polymorphism

What is polymorphism, Compile Time polymorphism, Run Time polymorphism(Method Overriding), Method overloading, Operator **Overloading**

WAP to perform Runtime Polymorphism

WAP to perform Runtime Polymorphism WAP to perform operator overloading

WAP to perform compile time polymorphism

Inner Class

JAVA inner Classes, Private Inner class, static inner classes, Access Outer Class from inner class,

we think for you

WAP programs to create inner class

WAP a program for static inner classes

WAP to perform enability of inner classes

Abstraction

Abstraction, Abstract Method, Abstract Classes, Advantages of Abstraction

Is it possible to create abstract and final class in Java?

Is it possible to have an abstract method in a final class?

Is it possible to inherit from multiple abstract classes in Java?

WAP program to demonstrate abstraction

Abstraction and Interface

LEncapsulation

What is encapsulation, get and set in encapsulation, Program for demonstration of Encapsulation with example, why encapsulation, Advantages of Encapsulation

Collection Framework in JAVA

What is collection framework, Uses of collection framework, ArrayList, LinkedList, Array List Vs. LinkedList, List Interface, Hash Set, Linked Hash Set, JAVA Tree Set, Queue & priority Queue, Deque & Array Deque, MAP Interface, HashMap Interface, Linked HashMAp, Tree Map, EnumSet, EnumMap,Collection class, Sortings Collection,Vector, ArrayList Vs. Vector

4 Multithreading in JAVA

What is thread, Life cycle of thread, creating thread, Scheduling thread, sleeping threads calling run(), joining thread, Thread Group, Thread pool

4 JDBC

What is JDBC What are different types od Databases Drivers for JDBC Connecting to Database Insertion with the Database **ResultSet in DATABASE** Statements in JDBC Performing various operations on Database **Hands on for the JAVA Programming concept for interview** WAP to print Fibonacci Series WAP to print Prime Number WAP to demonstrate Palindrome WAP to demonstrate Integer Palindrome WAP to print Armstrong Number WAP to avoid deadlock in JAVA Factorial programs in java Remove duplicates from array in JAVA WAP to calculate square root in JAVA echnologies String Anagram in JAVA Sort array using Quick Sort **Insertion** Sort we think for you **Bubble Sort** WAP to print all permutations of String WAP to reverse a string in place Adding to metrics in JAVA WAP to perform Matrix Multiplication Remove all white spaces in String WAP to perform reverse linked list WAP to find length of linked list Find Middle of Link List WAP program to sort linked List WAP to perform iterative Sort

WAP to perform Iterative QuickSort WAP to perform Bucket Sort Check for the string are the rotation of each other WAP to perform LRU cache in JAVA Performing with Merge Sort Add on More Program on JAVA

Technologies we think for you