Core java Course Content

Java Basics:-

- 1. Programming Language
- 2. Types of Programming Languages
- 3. Why Java is Important?
- 4. Overview of Java
- 5. Features of Java
- 6. Java Environment Setup
- 7. JVM, JRE, JDK
- 8. Compiling and Execution of a Java Program.
- 9. Variables, Identifiers, Data Types
- 10. Static Block
- 11. Typecasting
- 12. Conditional and Loop Statements
- 13. Switch Statement
- 14. Break and Continue Statement
- 15. Operators
- 16. Ways to create an Object in Java
- 17. Command Line Arguments

Java OOPS Concepts:-

- 1. Objects & Classes
- 2. Method in Java
- 3. Constructors(Default and Parameterized Constructors)
- 4. Access Modifiers
- 5. Inheritance
- 6. Aggregation
- 7. Method Overloading
- 8. Method Overriding
- 9. Runtime Polymorphism
- 10. this keyword
- 11. Garbage Collector
- 12. Static, Final.
- 13. instanceOf operator
- 14. Package
- 15. SubPackage and static import
- 16. Interface
- 17. Nested classes
- 18. Classes vs Interface

String Handling

- 1. Introduction to String
- 2. String class Function
- 3. StringBuffer class
- 4. StringBuilder class
- 5. String Tokenizer

Java Exception Handling

- 1. Introduction to Exception
- 2. try and catch blocks
- 3. try with resource statements
- 4. Throw, throws and finally
- 5. Custom Exceptions

Multithreading:

- 1. Introduction to Multi Threading
- 2. Thread class
- 3. Creating Thread
- 4. Joining Threads
- 5. Sleeping Thread
- 6. Thread Priority
- 7. Deamon Thread
- 8. Synchronization
- 9. Thread Group

Advance Concepts:-

- 1. Enumerations
- 2. Autoboxing and Unboxing
- 3. Java I/O streams
- 4. Serialization
- 5. Generics

Collection Framework:

- 1. Introduction to Collections
- 2. Collection Interfaces
- 3. Collection classes
- 4. Iterator and ListIterator
- 5. Array List and LinkedList
- 6. Linked List Class
- 7. Hash Set Class
- 8. linkedhashset Class
- 9. Tree Set Class
- 10. Map Interface
- 11. Hashmap Class
- 12. Treemap Class
- 13. HashTable Class
- 14. Collections Class
- 15. Comparable Class
- 16. Comparator Interface

Wrapper Classes

- 1. Integer
- 2. Float
- 3. Boolean
- 4. Double
- 5. Character
- 6. Short

Java Reflection

- 1. Introduction to Reflection
- 2. Reflection classes

Miscellaneous Concepts

- 1. Inner class
- 2. File Handling
- 3. Abstract class

Java 8 Features:-

- 1. Lambda Expression
- 2. Java Reflection API
- 3. Java Collectors Class
- 4. Method Reference
- 5. Stream API
- 6. Date and Time API
- 7. Default and Static Methods
- 8. Functional Interface
- 9. Java Optional class
- 10. Java Predicate

Java 9,11 Features