

SI #	TOPIC	Sub Topic
		JAVA BASICS
1	Overview	
		JAVA IDE [Environment Setup]
		o Data Types, Variables and Arrays
		o Keywords
		o Operators
		o Control statements
		- If
		- If-else
		- switch case
		o Loops
		- while
		- do while
		- for
		- for-each
		Break
		Continue
		o OOP's Principles
		- Inheritance
		- Abstraction
		- Encapsulation
		- Polymorphism
		o JDK / JRE
		o Environment Setup
		- JAVA_HOME
		- JRE_HOME
		- Eclipse
		o Hello world with Command Line Arguments
2	Java Classes and Oops	
		o Class Fundamentals
		o Understanding of Access Controls:
		- Private, Public and Protected
		o Keywords
		- super
		- this
		- static
		- final
		o Declaration on of Objects
		- constructor
		o Instance Variable / Methods
		o Overloading and Overriding of Methods
		o Using Abstract Classes
		o Garbage Collection
3	Packages and Interfaces	
		o Defining a Package
		o Understanding CLASSPATH
		o Defining and implementing an Interface
		o Abstract classes Vs Interfaces
4	Introduction to Array	
		o Single dimension array
		o Multi dimension array
5	Exception Handling	
		o Fundamentals of exception on handling
		o Types of exceptions
		o Learning exception handlers
		o Try, catch and finally
		o Multiple catch clauses
		o Nested try statements
		o Throw, throws and finally
		o Custom Exception
6	String Handling	
		o String & Operations
		o String Pool
		o String Buffer Class & String Builder Class
7	Multithreading	
		o The Java Thread Model
		o Creating a Thread: Extending Thread, Implementing Runnable
		o Methods

		- Start / run
		- sleep
		- wait / waitAll
		- notify / notifyAll
		- join / yield
		o synchronized
8	Managing Input / Output	
		o Introduction to I/O streams
		o File Handling
		o Binary Streams
		o Character Streams
		o Data Streams
		o Serialization
9	Collection API	
		o Collection Overview
		o The Collection Interfaces (List, Set, SortedSet)
		o The Collection Classes (ArrayList, LinkedList, HashSet, TreeSet)
		o Accessing a Collection via an Iterator
		o Working with Maps
10	Date / Time Handling	
		o java.util.Date
		o java.util.Calendar
		o java.sql.Date
		o java.time.LocalDate
		o java.time.LocalDateTime
		o java.time.LocalTime
		o java.time.Instant
11	Java 8 Features	
		o Lambda Expressions.
		o Functional Interface.
		o Default Methods and static methods.
		o Predefined Functional Interfaces.
		Predicate
		Function
		Consumer
		Supplier
		o Double colon operator (:: (In C scope resolution)) used for Method reference and Constructor reference.
		o Streams.
		o Date and Time API.
		o Optional class.
12	JDBC	
		o Introduction to JDBC
		o JDBC Drivers
		o Statements
		o Metadata
		o Scrollable & Updatable ResultSet
		o Batch Updates
		o JDBC Templates