



CORE JAVA SYLLABUS

✚ Introduction

- ✚ Programming language
- ✚ Types and Paradigms
- ✚ Why Java ?
- ✚ Flavors of Java
- ✚ Java Designing Goal
- ✚ The Java Environment:
- ✚ Installing Java
- ✚ Java Program Development
- ✚ Compilation
- ✚ Executions

✚ Basic Language Elements:

- Lexical Tokens, Identifiers
- Keywords, Literals,
- Comments
- Primitive Datatypes,
- Operators

✚ Object Oriented Programming

- Class Fundamentals
- Object & Object reference
- Object Life time & Garbage
- Collection
- Creating and Operating
- Objects
- Constructor & initialization
- code block
- Access Control, Modifiers,
- methods
- Nested , Inner Class
- Abstract Class & Interfaces
- Defining Methods,
- Argument Passing
- Mechanism
- Method Overloading
- Use of Modifiers with

- Classes & Methods
- Extending Classes and
- Inheritance
- Use and Benefits of
- Inheritance in OOP
- Types of Inheritance in Java
- Inheriting Data Members and Methods

+ Package

- Organizing Classes and
- Interfaces in Packages
- Package as Access
- Making JAR Files for
- Library Packages

+ Exception Handling:

- The Idea behind Exception Exceptions & Errors
- Types of Exception
- Control Flow In Exceptions
- Use of try, catch, finally, throw, throws in Exception Handling
- In-built and User Defined Exceptions
- Checked and Un-Checked Exceptions

+ Array & String :

- Defining an Array
- Initializing & Accessing Array
- Multi –Dimensional Array

+ Operation on String

- Mutable & Immutable String
- Using Collection Bases
- Loop for String
- Tokenizing a String
- Creating Strings using StringBuffer

+ The Collection Framework

- Collections of Objects
- Collection Types
- Sets
- Sequence
- Map