

# Java SE (Core JAVA)

---

## **Introduction to Java**

- JDK
- JRE

Discussion of Java features and OOPS Concepts

Installation of Netbeans IDE

## **Datatypes**

- primitive data types
- non-primitive data types

Variable declaration

Operators

Control flow statements

Command line arguments

Passing command line arguments in Netbeans

Take input and display output

Arrays and Enhanced for loop

## **OOPS programming**

- class and object
- various types of constructors
- instance methods and static methods
- use of this keyword
- use of super keyword
- inheritance
- polymorphism
- package and various scope rules
- abstract class and interfaces
- use of static, final keyword
- Annotations
- anonymous object
- inner class
- anonymous inner class

## **Exception handling**

- try, catch, finally, throw, throws
- checked exception
- unchecked exception

## **String Handling**

- mutable string
- immutable string
- String, StringBuilder, and StringBuffer

## **IO (Input and Output)**

- byte stream
- character stream

Working with Date class

Collections

Wrapper classes

**Multithreading programming**

- Thread class
- Runnable interface

**GUI programming**

- Difference between CUI and GUI
- Swing (various components and containers)
- Event handling
- Applet through JApplet
- Develop GUI using Netbeans Drag n drop feature

**JDBC (Java database connectivity)**

- Basics of SQL
- executing SQL using statement
- executing SQL using preparedstatement
- ResultSetMetaData

Socket programming

**Project**

