



Certificate of Learning



ABHISHEK YASHWANT THASAL

Student ID: 85483

has completed the following course

Java Master Course(Basic To Expert Level) 60+ Hours

62hr,48min

Total Duration

249

No. of Lessons

Beginner

Level of the Course

Issued on **14th April 2021**

Certificate Link [learnmall.in/cert/FHH985483](https://www.learnmall.in/cert/FHH985483)



Learning Summary



ABHISHEK YASHWANT THASAL (Student ID: 85483)

has completed the following course

" Java Master Course(Basic To Expert Level) 60+ Hours "

- ▶ Course Segmentation: **Development > Programming Languages > Java**
- ▶ Duration: **62 hours 48 minutes**
- ▶ Level: **Beginner**
- ▶ No. of Lessons: **249**
- ▶ Issue Date: **14th April 2021**

Course Syllabus

▶ Java Introduction

- About this Tutorial
- What is Java?
- Downloading, Installing and Configuring Java
- Downloading, Installing and Launching Eclipse IDE
- Creating a Java Project
- Understanding Java Programs
- Compiler Errors
- Print Statements
- Shortcut for writing System.out.println() statement
- Comments
- Variables

▶ Data Types

- Data Types
- int Data Type
- double Data Type
- char Data Type
- boolean Data Type
- String non-primitive Data Type
- byte Data Type
- short Data Type
- long Data Type
- float Data Type
- Passing decimal values to the int data type declared variables
- Passing character values to the int data type declared variables
- Assigning byte, short, long, float, boolean and String values to the int declare
- Assigning out of range values integer value to byte, short, int and long type va

▶ Literals

- Different Types of Literals
- Escape Characters
- Using _ in Numeric Literals
- Difference between Integer Literals and Long Literals
- Assigning different Literals to byte data type variable
- Assigning different Literals to short data type variable
- Assigning different Literals to long data type variable
- Assigning different Literals to float data type variable
- Assigning different Literals to double data type variable
- Assigning different Literals to boolean data type variable
- Assigning different Literals to String data type variable
- Assigning different Literals to char data type variable
- Expressing Floating Point Literals in scientific way
- Type Casting
- Types of Type Casting

▶ Operators

- Types of Operators
- Addition Operator
- Subtraction Operator
- Multiplication Operator
- Division Operator
- Modulus Operator
- Increment Operator
- Decrement Operator
- Relational Operators
- Logical Operators
- Simple Assignment Operator
- Compound Assignment Operators
- Conditional Operator
- Operator Precedence

▶ Flow Control Statements

- Flow Control Statements



- if Selection Statements
- if .. else Selection Statements
- if .. else if .. else Selection Statements
- switch Selection Statements
- Iterative Statements
- while Iterative Statement
- do-while Iterative Statement
- for Iterative Statement
- Transfer Statements
- break Transfer Statement
- continue Transfer Statement

► **Methods, Classes and Objects**

- Methods, Method Calling and Naming
- Method Parameterization
- Method Returning Values
- Classes enclose Variables and Methods
- What are Classes and Objects

► **Arrays**

- Arrays and their Types
- Single Dimensional Arrays
- Shortcut Representation of Single Dimensional Arrays
- Length of a single dimensional Array
- Using for loop with single dimensional arrays
- Using for-each loop with single dimensional arrays
- ArrayIndexOutOfBoundsException
- Two Dimensional Arrays
- Shortcut Representation of Two Dimensional Arrays
- Length of a Two Dimensional Arrays
- Using for loop with a Two Dimensional Array
- Three Dimensional Array
- Shortcut Representation of Three Dimensional Arrays
- Length of Three Dimensional Arrays
- Using for loop with a Three Dimensional Array
- Using for-each loop with a Two Dimensional Array
- Using for-each loop with a Three Dimensional Array
- Arrays and Data Types
- Object Class Arrays
- Disadvantages of Arrays

► **String Class and its methods**

- String Class
- String objects are immutable
- equals() String method
- Difference between == and equals() method
- equalsIgnoreCase() String method
- length() String method
- Difference between length and length()
- trim() String method
- substring() String method
- indexOf() String method
- lastIndexOf() String method

- split() String Class method
- concat() String method
- Using + Operator for Concatenation
- isEmpty() String Method
- startsWith() String Method
- endsWith() String Method
- toCharArray() String Method
- toUpperCase() String Method
- toLowerCase() String Method
- toString() String Class Method
- valueOf() String Class Method
- chatAt() String Class Method
- replace() String Class Method

► **StringBuffer Class and its methods**

- StringBuffer Class
- append() StringBuffer Class Method
- charAt() StringBuffer Class Method
- delete() StringBuffer Class Method
- deleteCharAt() StringBuffer Class Method
- insert() StringBuffer Class Method
- length() StringBuffer Class Method
- indexOf() StringBuffer Class Method
- lastIndexOf() StringBuffer Class Method
- replace() StringBuffer Class Method Method
- reverse() StringBuffer Class Method
- setCharAt() StringBuffer Class Method
- setLength() StringBuffer Class Method
- substring() StringBuffer Class Method
- toString() StringBuffer Class Method

► **Wrapper Classes**

- Wrapper Classes
- Working with different Wrapper Classes
- Wrapping
- Unwrapping
- Boxing
- Unboxing
- Autoboxing
- Auto-unboxing

► **Math Class and its methods**

- Math Class
- max() Math Class Method
- min() Math Class Method
- random() Math Class Method

► **Packages**

- Packages
- Package handling in Eclipse IDE
- Types of Packages
- Parent and Child Packages
- Packages and their Workspace Representation



- Packages Naming Conventions
- Importing User-defined Packages
- Importing In-built Packages
- java.lang default package

► Inheritance and its types

- Inheritance
- Types of Inheritance
- Single Inheritance Demonstration
- Multiple Inheritance Demonstration
- Multilevel Inheritance Demonstration
- Hierarchical Inheritance Demonstration
- Hybrid Inheritance Demonstration

► Constructors

- Constructors
- Purpose of Constructors
- Empty Hidden Constructor
- this keyword and Constructors
- Not initializing variables using Constructors results in default values
- Types of Constructors
- Constructor Overloading
- this() and Constructor Overloading
- Constructor Overriding is not possible
- Constructor Chaining
- super() Constructor Calling Statement

► Method Overloading and Overriding

- Method Overloading
- Method Overriding

► this and super keywords

- this keyword for differentiating Instance Variables
- this keyword for invoking current Class Methods
- this keyword for returning the Current Class Instance
- this keyword for passing the current class instance as method argument
- super keyword

► Modifiers

- Modifiers
- public Access Modifier
- private Access Modifier
- default Access Modifier
- protected Access Modifier
- static Non-Access Modifier
- final Non-Access Modifier
- abstract Non-Access Modifier

► Exception Handling

- Exception

- Exception Handling using try catch blocks
- try catch blocks and variables scope
- ArithmeticException
- ArrayIndexOutOfBoundsException
- Exception Hierarchy
- Multiple Catch Blocks
- Printing Exception details in different ways
- throw
- Checked and Unchecked Exceptions
- Handling and Ignoring Checked Exceptions
- throws
- throw versus throws
- finally
- final versus finally
- Statements execution in try block

► Interfaces

- Interfaces
- Interfaces and Naming Convention
- Interfaces and Constructors
- Interfaces and Variables
- Interfaces and Methods
- Implementing Interfaces
- Interfaces and Object Creation
- Implementing Multiple Interfaces
- Interface extending Interface
- Extending Classes and Implementing Interfaces together

► Abstract Classes

- abstract Classes
- abstract Classes and abstract methods
- abstract Classes and their child Classes
- abstract Classes and their method access modifiers
- abstract Classes and object creation
- abstract Classes and fields
- abstract Classes and Constructors
- Interfaces and method body

► Collections Framework

- Collections Framework
- Collection Interface
- List Interface
- ArrayList in Detail
- LinkedList
- Vector
- Stack
- Set Interface
- HashSet
- LinkedHashSet
- SortedSet
- NavigableSet
- TreeSet
- Map interface



- HashMap
- LinkedHashMap
- Hashtable
- Properties Class
- Converting Arrays to List



► **Other Advanced Topics**

- Reflection API
- Generics
- File Handling
- Getter and Setter Methods
- OOPS Concepts
- Database Concepts for JDBC
- SQL for JDBC
- JDBC
- Enum
- Varargs
- Purpose of few Inbuilt Annotations
- Scanner

