



अखिल भारतीय सूचना प्रौद्योगिकी संगठन

All India Information Technology Association

New Delhi

WORK RELATED TO MINISTRY OF INFORMATION TECHNOLOGY (GOVT. OF INDIA)

CERTIFICATE COURSE IN JAVA PROGRAMMING

Eligibility : 10th

Duration : 3 Months

Course Code : CR-07

Introduction of Java :- What is Java? , How to Get Java , A First Java Program , Compiling and Interpreting Applications , The JDK Directory Structure

Data types and Variables :- Primitive Data types ,Declarations , Variable Names , Numeric Literals , Character Literals , String , String Literals , Arrays , Non-Primitive Data types ,The Dot Operator

Operators and Expressions :- Expressions Assignment Operator , Arithmetic Operators Relational Operators Logical Operators Increment and Decrement Operators Operate -Assign operators (+ = , etc.) The Conditional Operator Operator Precedence Implicit Type Conversions The Cast Operator

Control Flow Statements :- Statements , Conditional (if) Statements , Data types and Variables 3 , Adding an else if , Conditional (switch) Statements , while and do-while Loops , for Loops , A for Loop Diagram , Enhanced for Loop , The continue Statement , The break Statement

Methods :- Methods , Calling Methods , Defining Methods , Method Parameters , Scope , Method Parameters

Object-Oriented Programming :- Introduction to Object-Oriented Programming , Classes and Objects , Fields and Methods , Encapsulation , Access Control , Inheritance , Polymorphism

Objects and Classes :- Defining a Class , Creating an Object , Instance Data and Class Data , Methods , Constructors , Access Modifiers , Encapsulation

Using Java Objects :- Printing to the Console , StringBuilder and StringBuffer , Methods and Messages toString , Parameter Passing , Comparing and Identifying Objects , Destroying Objects

Inheritance in Java :- Inheritance , Inheritance in Java , Casting , Method Overriding , Polymorphism , Super class

Packages :- The import Statement , Static Imports , Casting , CLASSPATH and Import , Defining Packages , Package Scope

Exception Handling :- Exceptions Overview , Catching Exceptions , The finally Block , Exception Methods , Declaring Exceptions , Defining and Throwing Exceptions , Errors and RuntimeExceptions

Input/Output Streams :- Overview of Streams , Bytes vs. Characters , Converting Byte Streams to Character Streams , File Object , Binary Input and Output , PrintWriter Class , Reading and Writing Objects , Basic and Filtered Streams

Collection Framework :- The Collections Framework , The Set Interface , Set Implementation Classes , The List Interface , List Implementation Classes , The Map Interface , Map Implementation Classes

Inner Classes :- Inner Classes , Member Classes , Local Classes , Anonymous Classes , Instance Initializers , Static Nested Classes

Introduction to Threads :- Non-Threaded Applications , Threaded Applications , Creating Threads , Thread States , Runnable Threads , Coordinating Threads , Interrupting Threads , Runnable Interface , ThreadGroups



अखिल भारतीय सूचना प्रौद्योगिकी संगठन
All India Information Technology Association
New Delhi

WORK RELATED TO MINISTRY OF INFORMATION TECHNOLOGY (GOVT. OF INDIA)

Interfaces and Abstract Classes :- Separating Interface and Implementation , UML Interfaces and Realization , Defining Interfaces , Implementing and Extending Interfaces , Runnable Threads , Abstract Classes

Serialization :- Object Serialization , Serializable Interface , Serialization API , ObjectOutputStream and ObjectOutputStream , The Serialization Engine , readObject and writeObject , Externalizable Interface



Admin Office New Delhi:

All India IT Association

B-1041, 3rd Floor, Sector 7, Near Palam Extension, Dwarka, New Delhi - 110075

Ph : +91 11 47350202, 47541212 | Help line : 91 999 39 500 00

Fax : +91 11 47350203, Email : president@aiita.org

Admin Office Indore :

All India IT Association

18/3, Pardeshipura Nr. Electronic Complex, Indore (M.P.) INDIA

Ph: +91 731 4055550, 4055551, 4222242, 4222252, 4299909, 4288812

Fax : +91 731 2573779 | Email: info@aiita.org