

Agenda

- Installation
- History
- Buzz Words
- Hello world
- Data types
- Operators
- Widening
- Narrowing

Installation

1. Install JDK
 2. Install STS
- Install both of them from the links provided in the pdf.

Java BuzzWords

1. Simple
2. Secure
3. Portable
4. Object Oriented
5. Robust
6. Architecture Netural(Platform Independent)
7. Multithreading
8. Interpreted
9. High Performance
- 10.Distributed
- 11.Dynamic

History of Java

Java Platforms

- Java SE - Standard Edition
- Core java
- Java EE - Enterprise Edition
 - Java ME - Micro Edition
 - Java Card

SDK,JDK,JRE,JVM

- SDK - Software Development Kit - Developemnt Tools + Documentation + Libraries + RunTime Environment
- JDK - Java Development Kit
 - Developemnt Tools + Documentation + Libraries + RunTime Environment
- JRE - Java Runtime environment - rt.jar + JVM
- JVM - Java Virtual Machine An engine which helps to execute the java code. We can also call it as Execution Engine

Datatypes

- It defines 3 things
 1. Memory
 - How much memory is required to store that data.
 2. Nature
 - What kind of data i can store
 3. Operations
 - What all operations we can perform on these data

- Datatypes are classified into 2 types
 1. Primitive (value Type) byte,short,int,long,float,double,char,boolean
 2. Non Primitive (Reference Type) class,Array,Interface

Wrapper classes

- For every primitive datatype java have defined a class.
- These clases are called as wrapper classes.
- All wrapper classes are final classes
- All wrapperclasses are declared in java.lang package

Widening

- a process of converting narrower type of data into wider type is called as widening
- No need of explicit Typecasting

Narrowing

- a process of convertinf wider type oda data into narrower type is called as narrowing

- It is a forced conversion.
- Explicit Typecasting is required.

Operators

1. Arithmetic Operators
+, -, *, /, %
2. Unary Operators
++, --
3. Relational Operators
==, !=, <, >, <=, >=
4. Bitwise Operators
&, |, ~, ^
5. logical operators
&&, ||, !
6. Assignment Operator
=, +=, -=, *=, /=, %=
7. Shift operator
>>, <<