# Introduction

* In Java file “java.lang.\*” package import automatically
* File name should be same as Class name. In case of class is public It **must be same as Class name**
* **JRE always needs main method signature only as below format**

public static void main(String[] args){ // body here }

* javap tool to see all methods of class

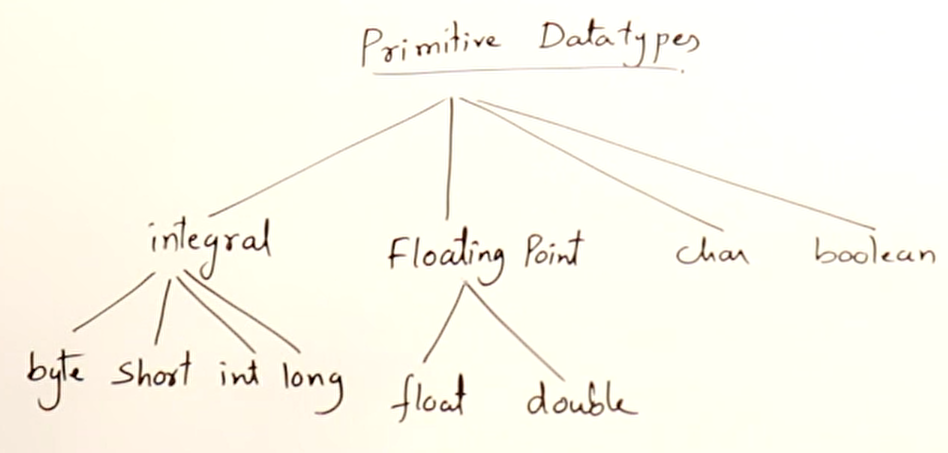
$ javap java.utils.Scanner

## Reading Data from Keyboard:

* Use Scanner class from “java.utils.\*” package
* Scanner support following methods to read different data types

1. nextInt()
2. nextFloat()
3. nextDouble()
4. next()
5. nextLine()
6. nextByte()
7. nextShort()
8. nextLong()
9. nextBoolean()
10. hasNextInt()
11. hasNextFloat()

# Data Types



* Every variable in java must be initialize [compile-time error]
* You cannot initialize variable outside the range supported [compile-time error]

## Rules for Variable Names

* Case Sensitive
* Contains Alphabets, Numbers, \_ or $
* Start with Alphabet,\_ or $
* Should not be a keyword
* Should not be a class name, if class is also in use
* No limit on length of name
* Follow Camel cases

# Features and Architecture

## JVM Architecture

Diagram

Description automatically generated

Graphical user interface

Description automatically generated

## Features of Java

* Simple
* Secure
* Portable
* Object-Oriented
* Robust
* Multithread
* Architecture-Neutral
* Interpreted
* High-Performance
* Distributed
* Dynamic

# Operators and Expression

Text, whiteboard

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## Precedence of Operators

Priority 1: / \* %

Priority 2: + -

If both operators at **same precedence**, then **They are Left to Right associated.**

## Widening and Narrowing

A picture containing text, blackboard, night sky

Description automatically generated

# String Class

## Format Specifier

Text

Description automatically generated

## String Methods

Text, letter

Description automatically generated

## Regular Expressions

Table

Description automatically generatedA picture containing chart

Description automatically generated

Table

Description automatically generated

# Conditional Statements

* Relational Operators(<,<=,>,>=,==,=) only work with **values/data** comparison Whereas Logical Operators(&&,||) only work with **Boolean values**.

# Reference

<https://www.udemy.com/course/java-se-programming/>