

Java Fundamental

CLASS- 2

Identifiers, variables, keywords

First Java Program

To create a simple java program, you need to create a class that contains the main method.

The requirements for Java programs:

- For executing any java program, you need to install the JDK if you don't have installed it, download the JDK and install it.
- Set path of the jdk/bin directory.
- Create the java program
- Compile and run the java program

Parameters used in Java Program

- **class** keyword is used to declare a class in java.
- **public** keyword is an access modifier which represents visibility. It means it is visible to all.
- **static** is a keyword. If we declare any method as static, it is known as the static method. The core advantage of the static method is that there is no need to create an object to invoke the static method. The main method is executed by the JVM, so it doesn't require to create an object to invoke the main method. So it saves memory.
- **void** is the return type of the method. It means it doesn't return any value.
- **main** represents the starting point of the program.
- **String[] args** is used for command line argument.
- **System.out.println()** is used to print statement..

Java Identifiers

Identifiers are basically a name in java program for identify the objects.

It can be a class name, variable name or method name.

There are following rules to define java identifiers:

- Only allowed characters can be the part of java identifiers, such as:

a to z, A to Z, 0 to 9 and \$ (dollar symbol).

Java Identifiers

- Identifiers can't start with digits.
- Identifiers are case sensitive.
- There is no length limit for identifiers but not recommended to take too lengthy identifiers.
- Any keyword can't be used as identifiers.
- Pre defined class names and interface names can be used as identifiers.
- **From java 9 version, `_` is a keyword, so can't be used as identifiers.**

Java Variables

A variable is a container which holds the value while the Java program is executed. A variable is assigned with a data type.

Variable is a name of memory location.

There are three types of variables in java:

1. **Local Variable:** A variable declared inside the body of the method is called local variable. You can use this variable only within that method and the other methods in the class aren't even aware that the variable exists.

A local variable cannot be defined with "static" keyword.

Java Variables

2. **Instance Variable:** A variable declared inside the class but outside the body of the method, is called instance variable. It is not declared as static.

It is called instance variable because its value is instance specific and is not shared among instances.

3. **Static variable:** A variable which is declared as static is called static variable. It cannot be local. You can create a single copy of static variable and share among all the instances of the class. Memory allocation for static variable happens only once when the class is loaded in the memory.

Java Keywords

Java keywords are also known as **reserved words**.

Keywords are particular words which acts as a key to a code. These are predefined words by Java so it cannot be used as a variable or object name.

Keywords are those words, which meaning is already know by compiler.

Java contains 48 keywords and each word has its own importance and functionality.

Java Keywords

Abstract	Boolean	Break	Byte	Case	Catch
Char	Class	Continue	Default	Do	Double
Else	Enum	Extends	Final	Finally	Float
For	If	Implements	Import	Instanceof	Int
Interface	Long	Native	New	Null	Package
Private	Protected	Public	Return	Short	Static
Strictfp	Super	Switch	Synchronized	This	Throw
Transient	Try	Void	Volatile	while	throws

WHAT'S NEXT



- Data types

