

# Day-4

# Agenda

**For Loop**

**For Each Loop**

**Class**

**Package**

## for loop

This is the most commonly used loop to retrieve the data from Array or Collections.

### Syntax

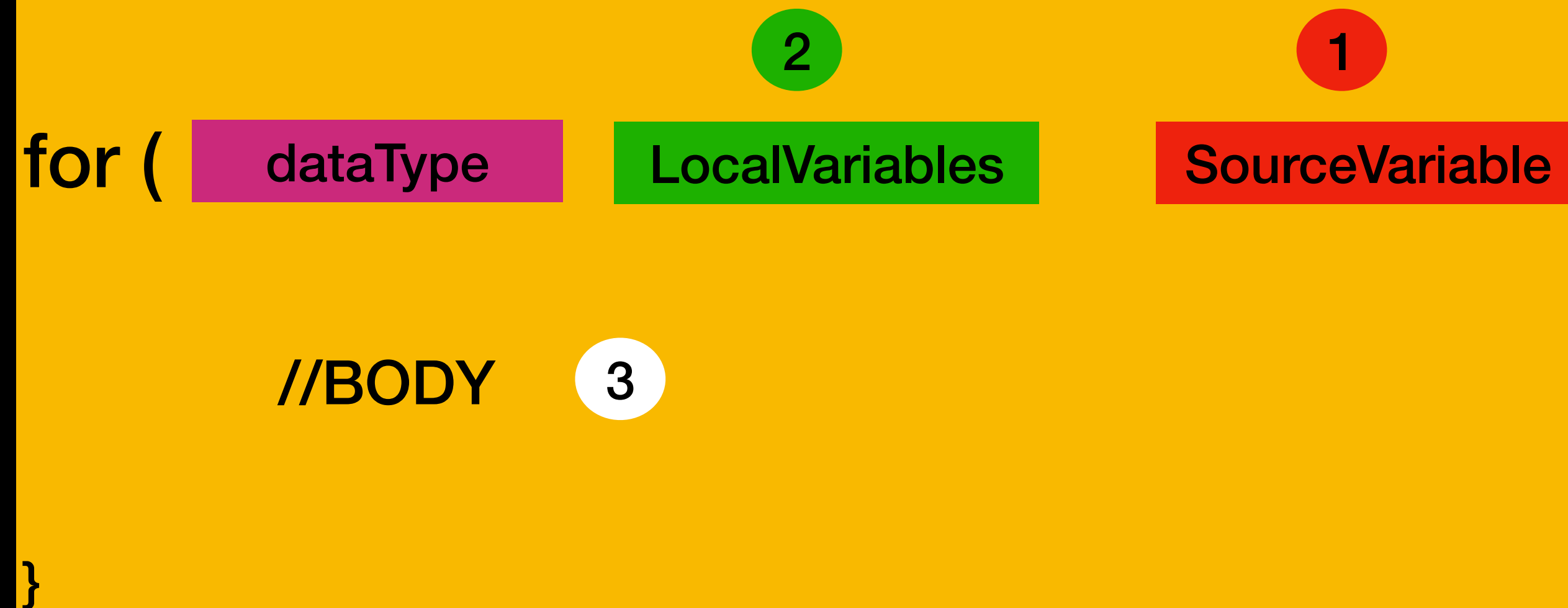
```
for ( 1 initial-Section ; 2 conditional-Expression ; 4 increment/decrement 7 ) {  
  
    3 //BODY 6 9  
  
}
```

for each loop

**This loop is also called as enhanced for loop . Introduced in 1.5V. Most convent loop to retrieve the data from Array & Collections**

## Syntax

```
for ( dataType LocalVariables SourceVariable  
    //BODY 3  
}
```

The diagram illustrates the syntax of the enhanced for loop. It shows the code 'for ( dataType LocalVariables SourceVariable //BODY }' on a yellow background. Three numbered circles point to specific parts: circle 1 points to 'SourceVariable', circle 2 points to 'LocalVariables', and circle 3 points to the body '//BODY'. The words 'dataType', 'LocalVariables', and 'SourceVariable' are each enclosed in a colored box (pink, green, and red respectively).

Break

**We can use break statement to stop the execution .**

### Continue

**We can use continue statement to skip the current execution & skip for the next execution.**

**When ever we are writing our own java class compulsory we have to provide information about**

**Our class to JVM**

**Whether our class can be accessible from anywhere or not**

**Whether child class creation is possible for our class or not**

**Whether instantiation is possible or not .**

**We can Specify this information by declaring with appropriate modifier . Which is ....**

Public

Final

strictfp

Default

Abstract

**It is Encapsulation mechanism to group related class and interface in to single module.**

**The main purpose of packages are ....**

**To Resolve Naming conflict**

**To provide Security to the class & interface . So that outside person can not access directly**

**It improve the modularity of the application .**

**In any JAVA program there should be only at most one package statement**

**In any JAVA program the first non comment statement should be package statement .**



**Object creation is not enough compulsory we should perform initialization then only that Object is in a position to provide response properly .**

**When ever we are creating an object some piece of the code will be executed automatically to perform initialization . This piece of code is nothing but constructor . Hence the main objective of Constructor is to perform initialization for the newly created object .**

### Rule to define the constructor

**The name of the class and name of the constructor must be matched**

**Return type concept is not applicable for constructor including void also.**

**The only applicable modifier for constructor are : “public, private, protected, default ”**

**If we are not writing any constructor then compiler will always generate default constructor .**  
**If we are writing at least one constructor then compiler would not generate default constructor .**  
**Hence a class can contain either programmer written constructor or compiler generated Constructor but not both simultaneously**