



## JAVA Activity 1

### What is Java?

- Java is a **programming language** and a **platform**.
- Java is a high level, robust, object-oriented and secure programming language.
- **Platform**: Any hardware or software environment in which a program runs, is known as a platform. Since Java has a runtime environment (JRE) and API, it is called a platform.

### Java Downloading steps:

- 1.Download Java
- 2.Install Java
- 3.Update Path environment variable
- 4.Verify Installation

## 1. Download Java

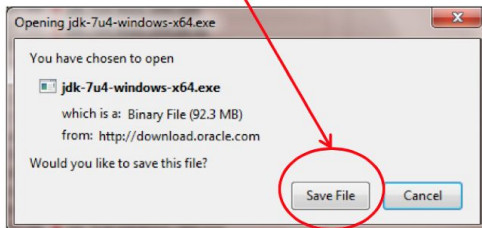
1. Open your web browser

2. Type URL:  
<http://www.oracle.com/technetwork/java/javase/downloads/index.html> to go to Oracle download page

3. Click on button "JDK download" for Java SE update 4. This will lead you to JDK download page  
<http://www.oracle.com/technetwork/java/javase/downloads/jdk-7u4-downloads-1591156.html>



4. Accept oracle license agreement
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6. Save the file to disk



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### Java SE Development Kit 7 Downloads

Thank you for downloading this release of the Java™ Platform, Standard Edition Development Kit (JDK™). The JDK is a development environment for building applications, applets, and components using the Java programming language.

The JDK includes tools useful for developing and testing programs written in the Java programming language and running on the Java platform.

**Looking for JavaFX SDK?**  
Starting with JDK 7u4 JavaFX SDK is included in the JDK for Windows and Mac OS X.

See also:

- [Java Developer Newsletter](#) (tick the checkbox under Subscription Center > Oracle Technology News)
- [Java Developer Day hands-on workshops \(free\) and other events](#)
- [Java Magazine](#)

#### Java SE Development Kit 7u4

You must accept the **Oracle Binary Code License Agreement for Java SE** to download this software.

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Product / File Description	File Size	Download
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Solaris SPARC (64-bit)	12.55 MB	<a href="#">jdk-7u4-solaris-sparcv9.tar.gz</a>
Solaris x64 (64-bit)	14.95 MB	<a href="#">jdk-7u4-solaris-x64.tar.Z</a>
Solaris x64 (64-bit)	9.54 MB	<a href="#">jdk-7u4-solaris-x64.tar.gz</a>
Windows x86 (32-bit)	87.97 MB	<a href="#">jdk-7u4-windows-i586.exe</a>
Windows x64 (64-bit)	92.33 MB	<a href="#">jdk-7u4-windows-x64.exe</a>

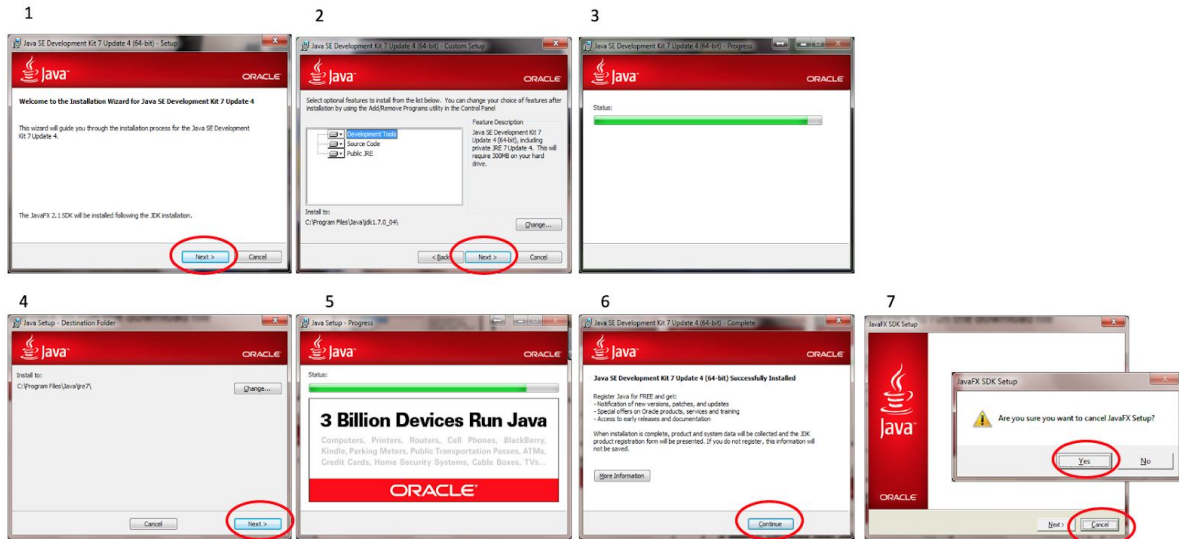
#### Java SE Development Kit 7u4 Demos and Samples Downloads

Java SE Development Kit 7u4 Demos and Samples Downloads are released under the [Oracle BSD License](#).



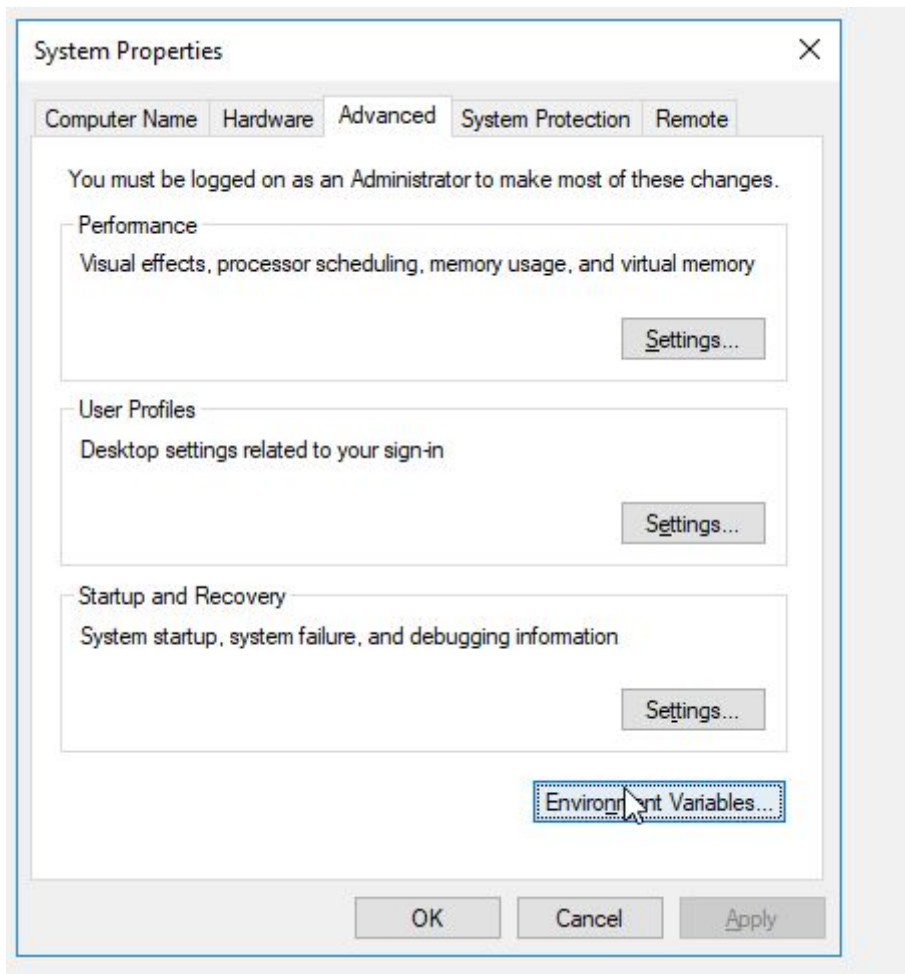
## 2. Install Java

1. Double click to run the download file
2. Just follow the prompt in Installer window



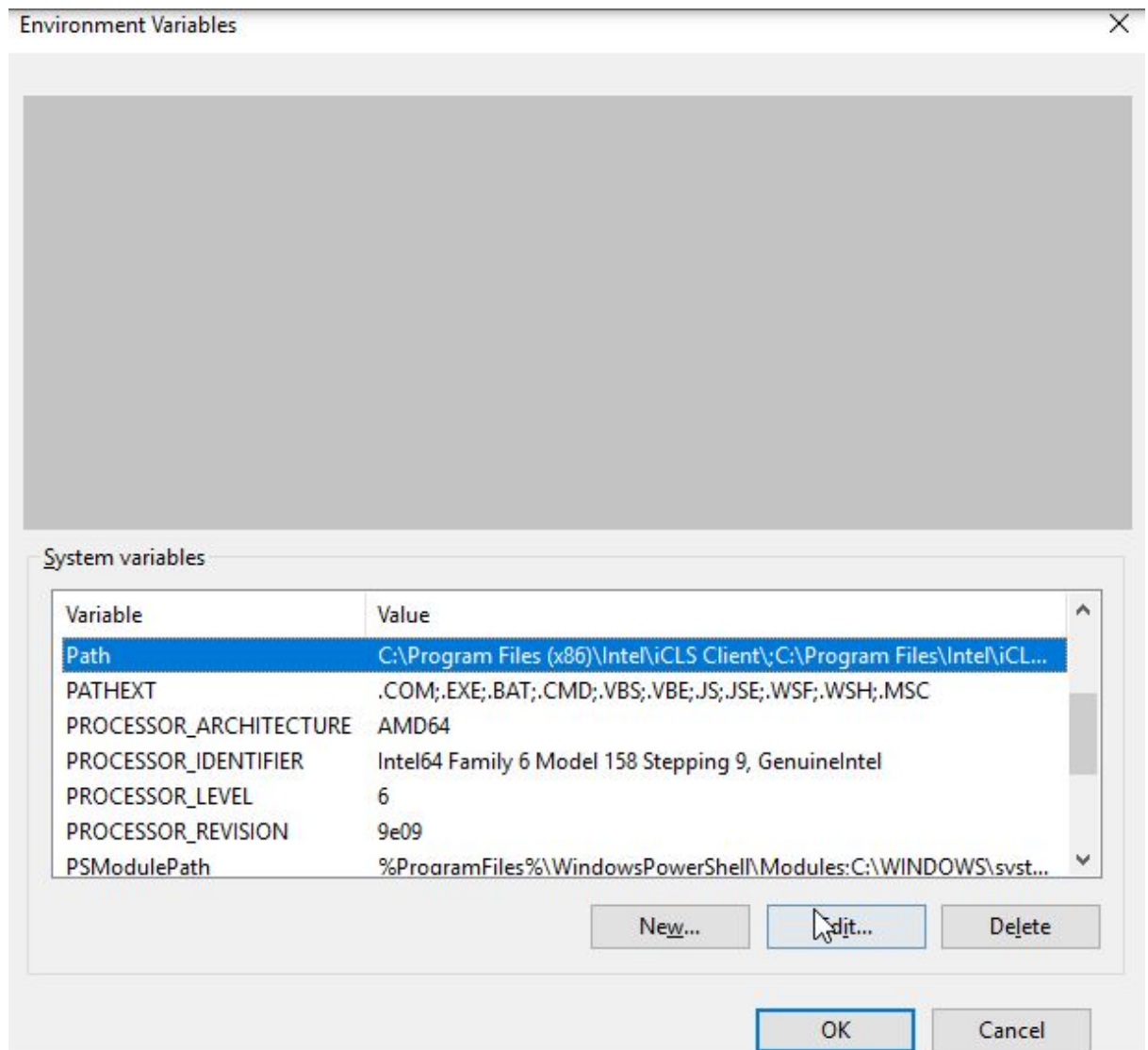
## 3. Setup for Windows

1. Go to "System Properties" (Can be found on Control Panel > System and Security > System > Advanced System Settings)
2. Click on the "Environment variables" button under the "Advanced" tab

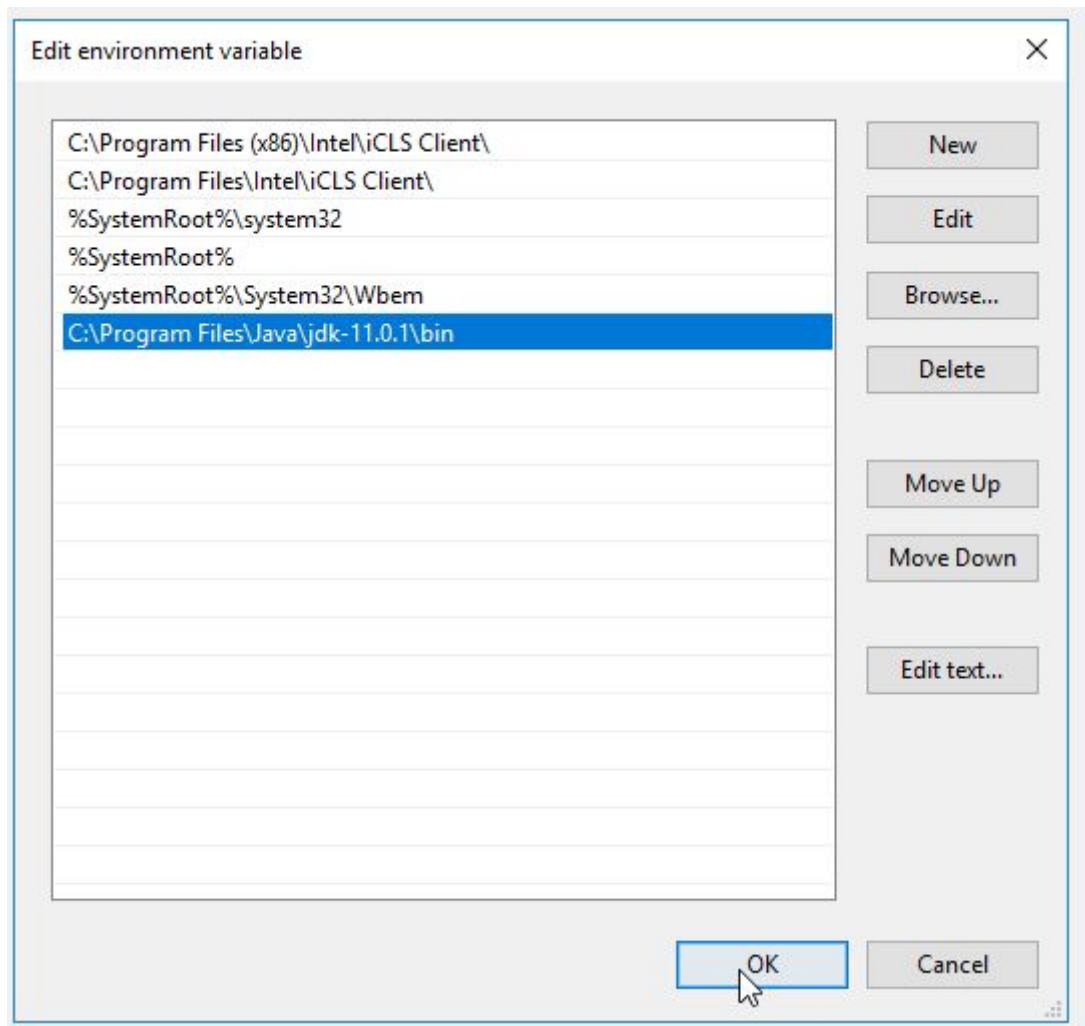




3. Then, select the "Path" variable in System variables and click on the "Edit" button



4. Click on the "New" button and add the path where Java is installed, followed by **\bin**.  
By default, Java is installed in C:\Program Files\Java\jdk-11.0.1 (If nothing else was specified when you installed it). In that case, You will have to add a new path with:  
**C:\Program Files\Java\jdk-11.0.1\bin**  
Then, click "OK", and save the settings



5. At last, open Command Prompt (cmd.exe) and type **java -version** to see if Java is running on your machine.





## Java Example

Let's have a quick look at Java programming example. A detailed description of hello Java example is available in next page.

```
class FirstProgram{
    public static void main(String args[]){
        System.out.println("Hello Java");
    }
}
```

## Types of Java Applications

There are mainly 4 types of applications that can be created using Java programming:

### 1) Standalone Application

Standalone applications are also known as desktop applications or window-based applications. These are traditional software that we need to install on every machine. Examples of standalone application are Media player, antivirus, etc. AWT and Swing are used in Java for creating standalone applications.

### 2) Web Application

An application that runs on the server side and creates a dynamic page is called a web application. Currently, [Servlet](#), [JSP](#), [Struts](#), [Spring](#), [Hibernate](#), [JSF](#), etc. technologies are used for creating web applications in Java.

### 3) Enterprise Application

An application that is distributed in nature, such as banking applications, etc. is called enterprise application. It has advantages of the high-level security, load balancing, and clustering. In Java, [EJB](#) is used for creating enterprise applications.

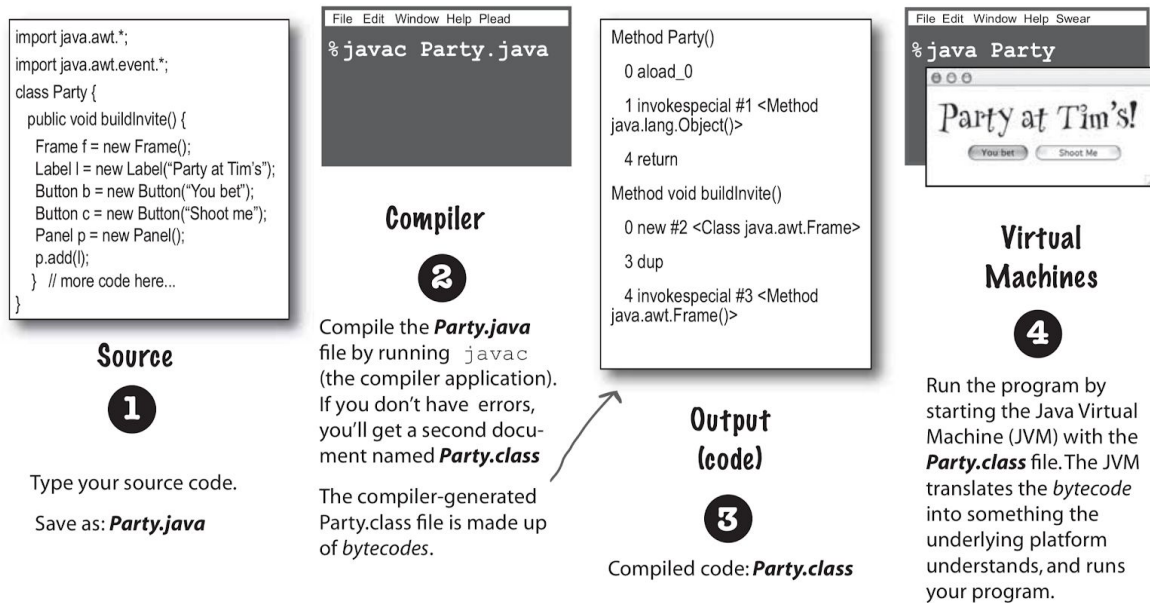
### 4) Mobile Application





An application which is created for mobile devices is called a mobile application. Currently, Android and Java ME are used for creating mobile applications.

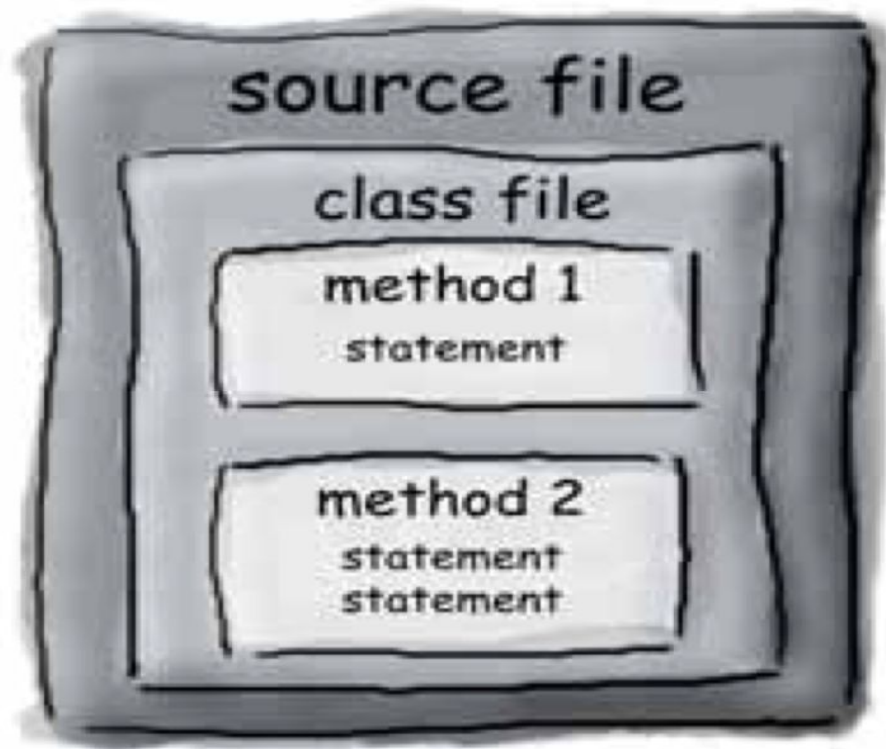
### Compiling Procedure:







## Code structure in JAVA



**Put a class in a source file.**

**Put methods in a class.**

**Put statements in a method.**



## Anatomy of Program:

