

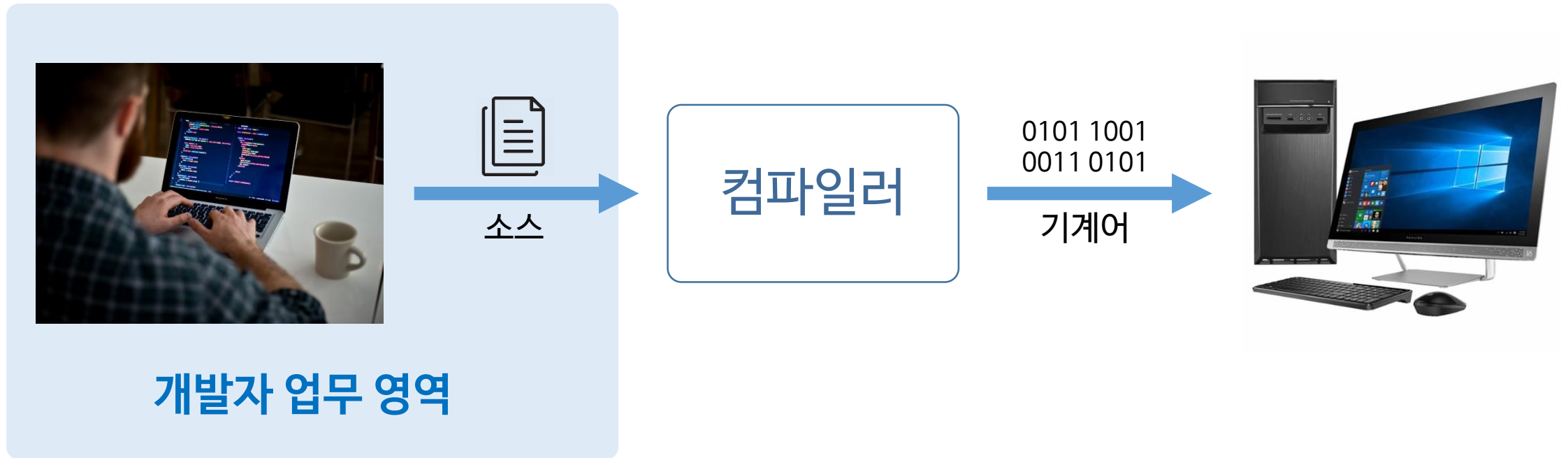
java

1강_Java 프로그래밍이란?

Java 언어를 이용해서 프로그래밍을 하기 위한 기본 지식에 대해서 학습합니다.

- 1-1 프로그래밍이란?
- 1-2 Java 언어의 탄생
- 1-3 Java 언어의 특징
- 1-4 Java 프로그래밍을 위한 기본 준비물
- 1-5 Hello Java World!!

1-1 : 프로그래밍이란?



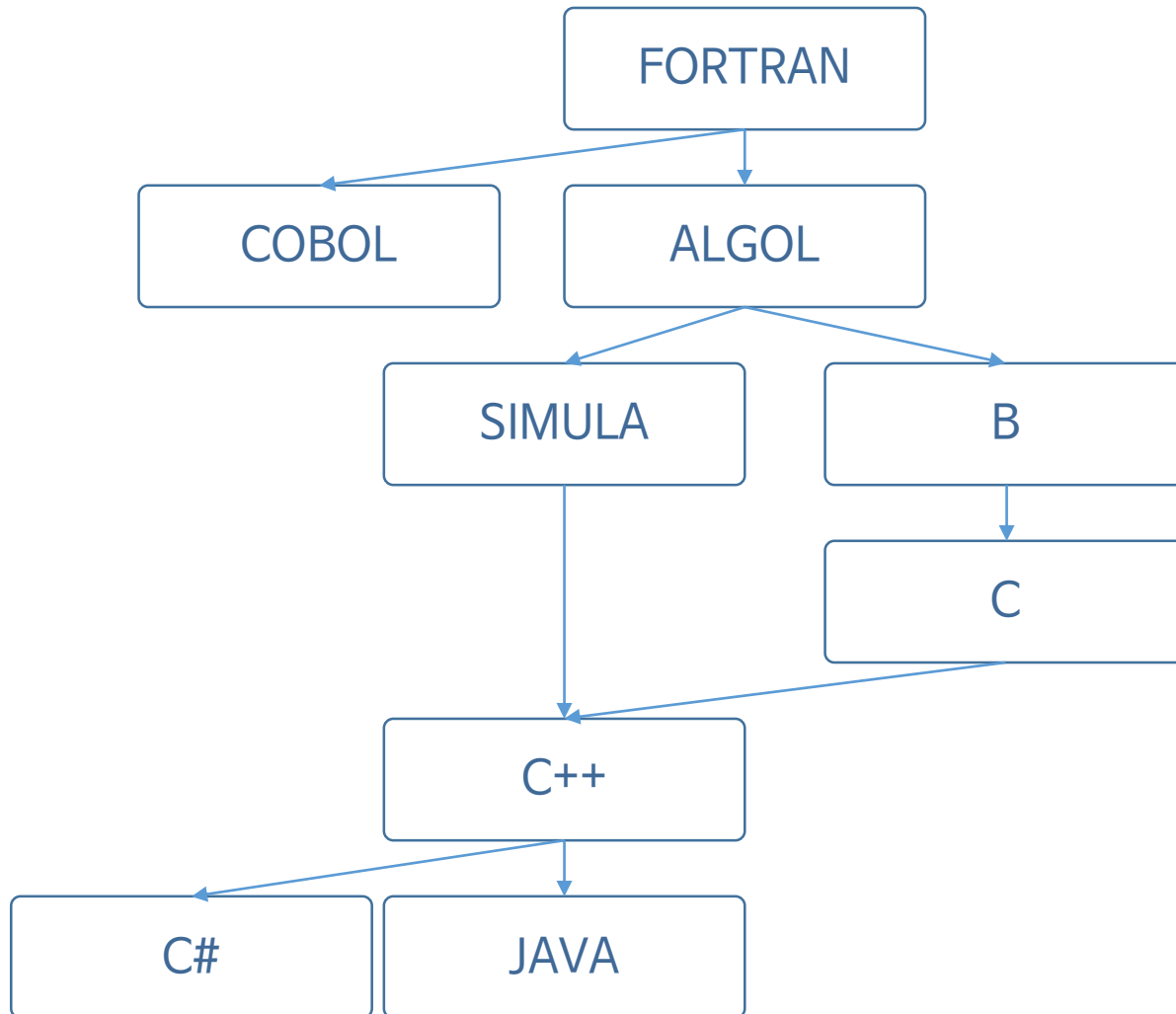
1-2 : Java 언어의 탄생



James Gosling

- 1995년 제임스 고슬링 (James Gosling)에 의해서 탄생.
- 썬 마이크로시스템즈 (Sun Microsystems)에서 발표.
- 오크 (Oak) 언어에서 시작해서 Java 언어로 발전.
- 가전제품에 탑재할 수 있는 프로그램을 개발하기 위한 목적으로 탄생.

1-3 : Java 언어의 특징



초창기 시절에 Java 언어의 단점

- 기존 C/C++에 비해서 속도가 굉장히 느린다.
- 리소스(메모리, CPU)를 많이 사용한다.

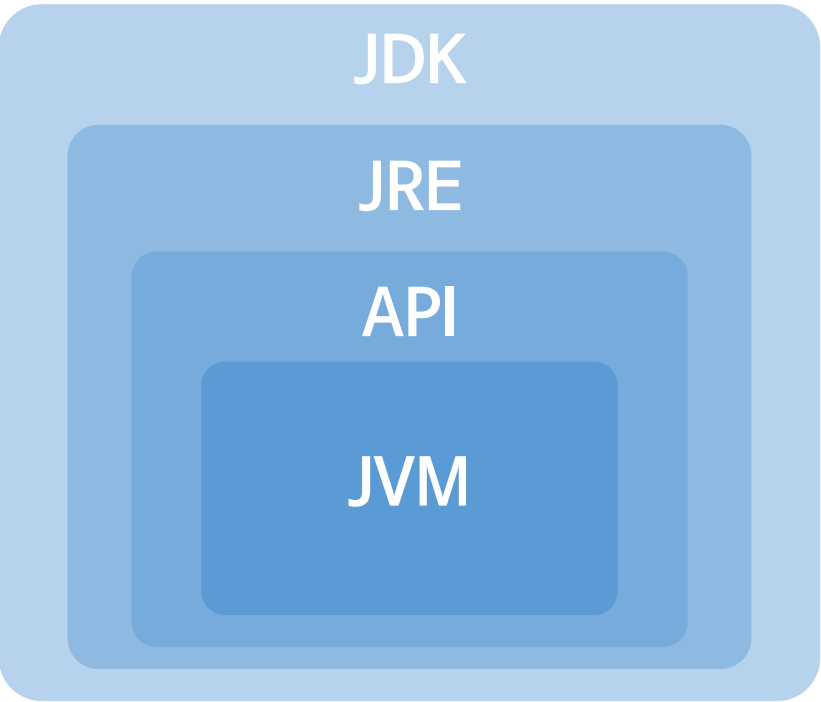


현재 Java 언어의 장점

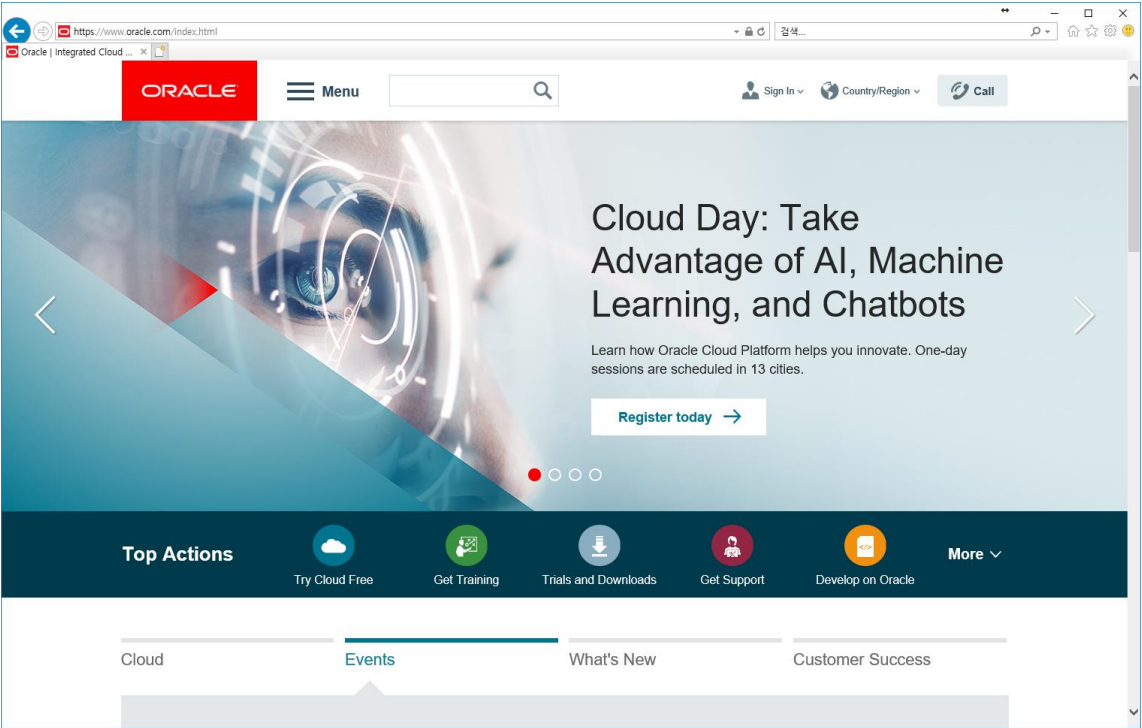
- 객체 지향 언어로 기능을 부품화할 수 있다.
- JRE를 이용해서 운영체제로부터 자유롭다.
- 웹 및 모바일 프로그래밍이 쉽다.
- GC를 통한 자동 메모리 관리를 지원한다.
- 실행 속도가 많이 개선되어 빨라졌다.

1-4 : Java 프로그래밍을 위한 기본 준비물

JDK(Java Development Kit) 설치

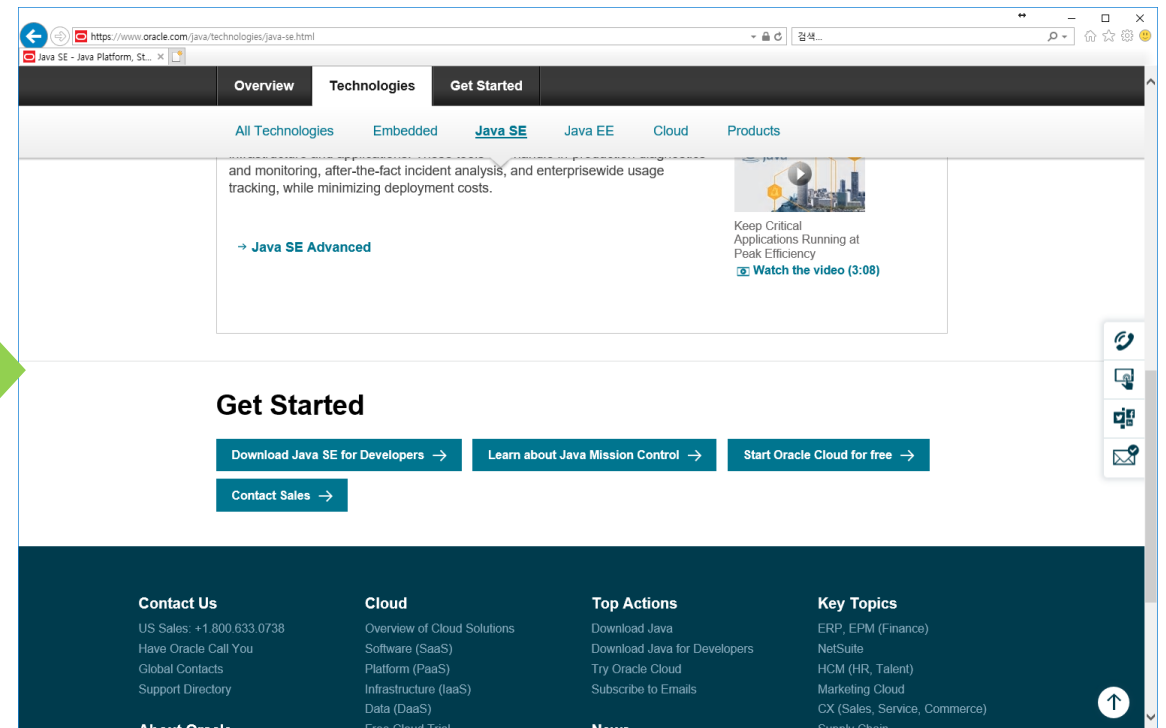
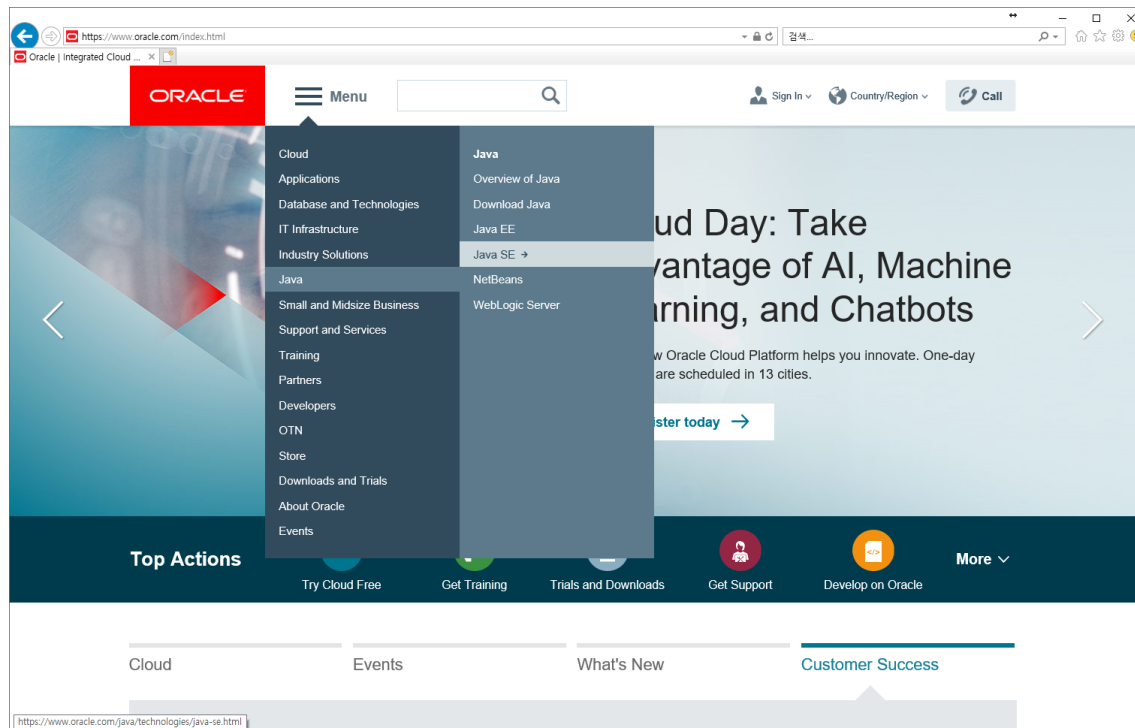


개발자는 JDK가 있어야 개발을 할 수 있고,
단지 프로그램만을 사용하는 사용자라면 JRE만 설치되어 있으면 된다.



1-4 : Java 프로그래밍을 위한 기본 준비물

JDK(Java Development Kit) 설치



1-4 : Java 프로그래밍을 위한 기본 준비물

JDK(Java Development Kit) 설치

http://www.oracle.com/technetwork/java/javase/downloads/index.html

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Java SE - Downloads | Ora...

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- Java SE Licensing Information User Manual
 - Includes Third Party Licenses
- Certified System Configurations
- Readme

Server JRE

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JRE

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Which Java package do I need?

- Software Developers: JDK (Java SE Development Kit). For Java Developers. Includes a complete JRE plus tools for developing, debugging, and monitoring Java applications.
- Administrators running applications on a server: Server JRE (Server Java Runtime Environment) For deploying Java applications on servers. Includes tools for JVM monitoring and tools commonly required for server applications, but does not include browser integration (the Java plug-in), auto-update, nor an installer. [Learn more](#)
- End user running Java on a desktop: JRE: (Java Runtime Environment). Covers most end-users needs. Contains everything required to run Java applications on your system.

Java SE 8u151/ 8u152

Java SE 8u151 includes important bug fixes. Oracle strongly recommends that all Java SE 8 users upgrade to this release. Java SE 8u152 is a patch-set update, including all of 8u151 plus additional features (described in the release notes). [Learn more](#)

Installation Instructions

Release Notes

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Java SE Licensing Information User Manual

- Includes Third Party Licenses

Certified System Configurations

Readme Files

- JDK ReadMe
- JRE ReadMe

JDK

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JRE

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Java SE 7 and Java SE 6 updates

Updates for Java SE 7 released after April 2015, and updates for Java SE 6 released after April 2013 are only available to Oracle Customers through [My Oracle Support](#) (requires support login).

Java SE Advanced offers users commercial features, access to critical bug fixes, security fixes, and general maintenance.

Early Access Releases

Early access versions of future releases of the JDK and the JRE are available for testing. These early access releases include future update and future major releases. These releases are licensed only for testing, not for use in production.

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JDK 8 Demos and Samples

Demos and samples of common tasks and new functionality available on



http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html

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Java SE Development Kit 8...

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Java SE Development Kit 8 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.

See also:

- Java Developer Newsletter: From your Oracle account, select Subscriptions, expand Technology, and subscribe to Java.
- Java Developer Day hands-on workshops (free) and other events
- Java Magazine

JDK 8u151 checksum
JDK 8u152 checksum

Java SE Development Kit 8u151

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|-----------------------------|-----------|---|
| Linux ARM 32 Hard Float ABI | 77.9 MB | jdk-8u151-linux-arm32-vfp-hflt.tar.gz |
| Linux ARM 64 Hard Float ABI | 74.85 MB | jdk-8u151-linux-arm64-vfp-hflt.tar.gz |
| Linux x86 | 168.95 MB | jdk-8u151-linux-i586.rpm |
| Linux x86 | 162.73 MB | jdk-8u151-linux-i686.tar.gz |
| Linux x64 | 166.1 MB | jdk-8u151-linux-x64.rpm |
| Linux x64 | 180.95 MB | jdk-8u151-linux-x64.tar.gz |
| macOS | 247.06 MB | jdk-8u151-macosx-x64.dmg |
| Solaris SPARC 64-bit | 140.06 MB | jdk-8u151-solaris-sparcv9.tar.Z |
| Solaris SPARC 64-bit | 99.32 MB | jdk-8u151-solaris-sparcv9.tar.gz |
| Solaris x64 | 140.65 MB | jdk-8u151-solaris-x64.tar.Z |
| Solaris x64 | 97 MB | jdk-8u151-solaris-x64.tar.gz |
| Windows x86 | 198.04 MB | jdk-8u151-windows-i586.exe |
| Windows x64 | 205.95 MB | jdk-8u151-windows-x64.exe |

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| Linux ARM 64 Hard Float ABI | 74.88 MB | jdk-8u152-linux-arm64-vfp-hflt.tar.gz |
| Linux x86 | 168.99 MB | jdk-8u152-linux-i586.rpm |

Java SDKs and Tools

- Java SE
- Java EE and Glassfish
- Java ME
- Java Card
- NetBeans IDE
- Java Mission Control

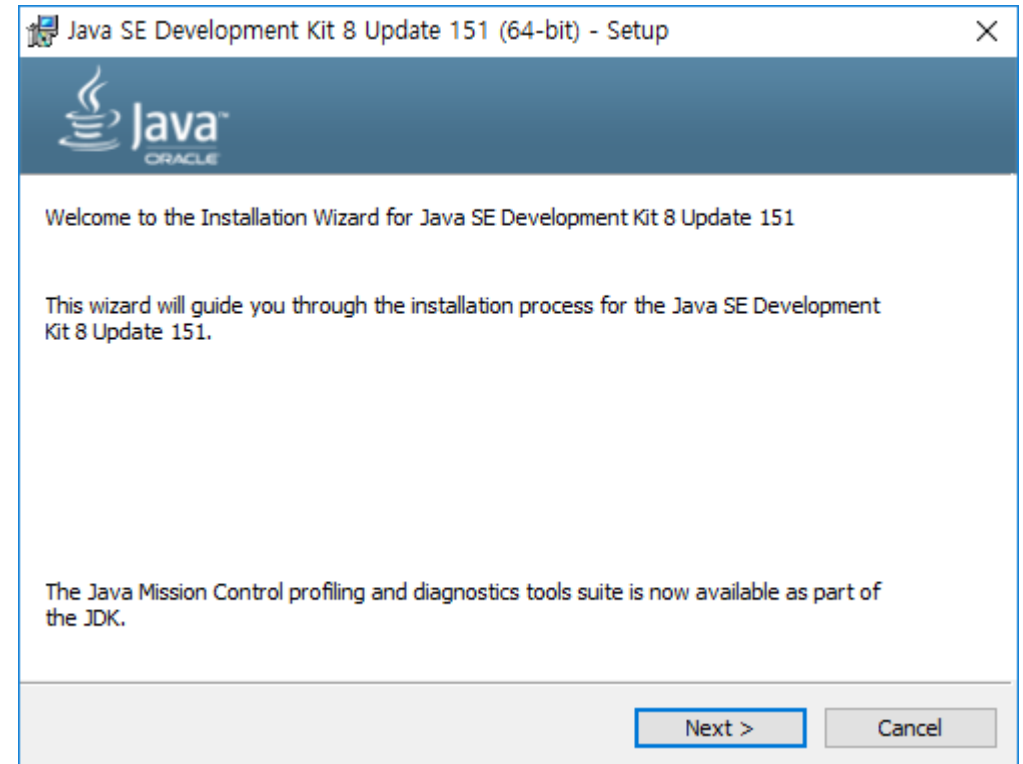
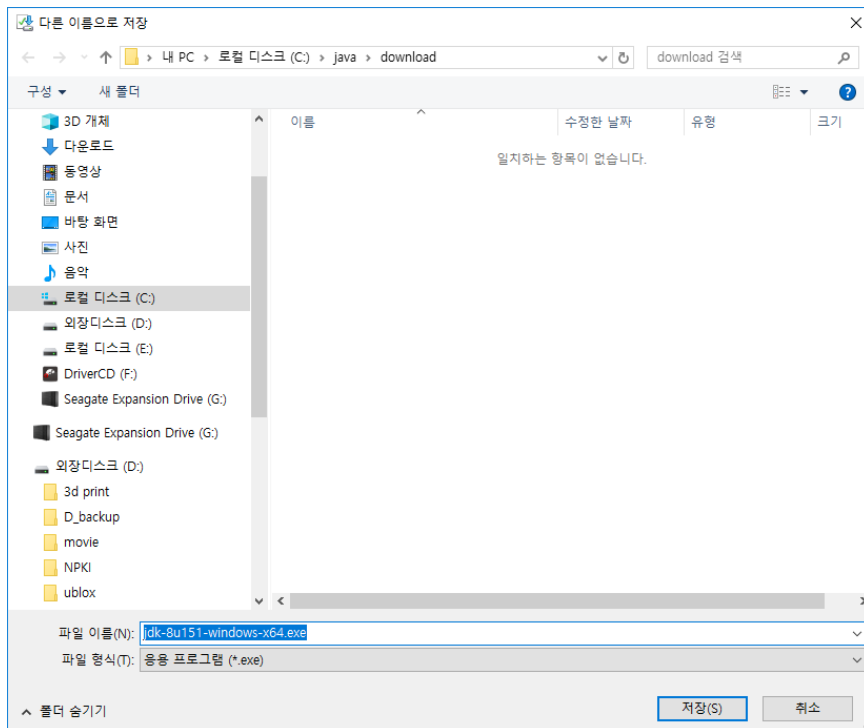
Java Resources

- Java APIs
- Technical Articles
- Demos and Videos
- Forums
- Java Magazine
- Developer Training
- Tutorials
- Java.com



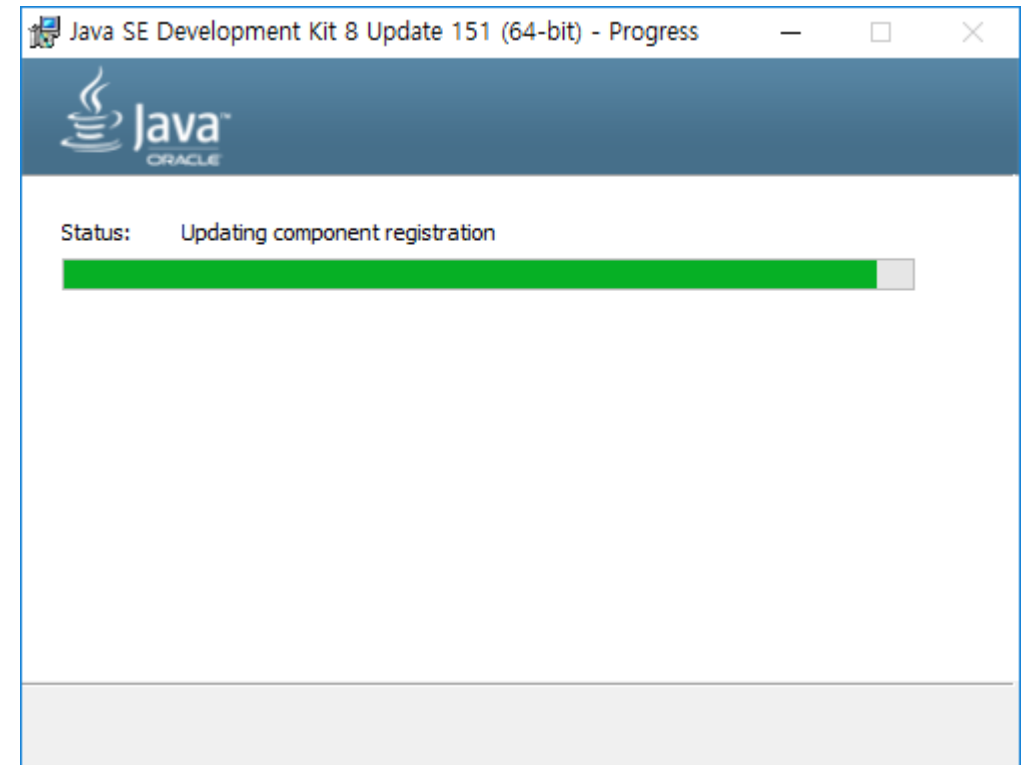
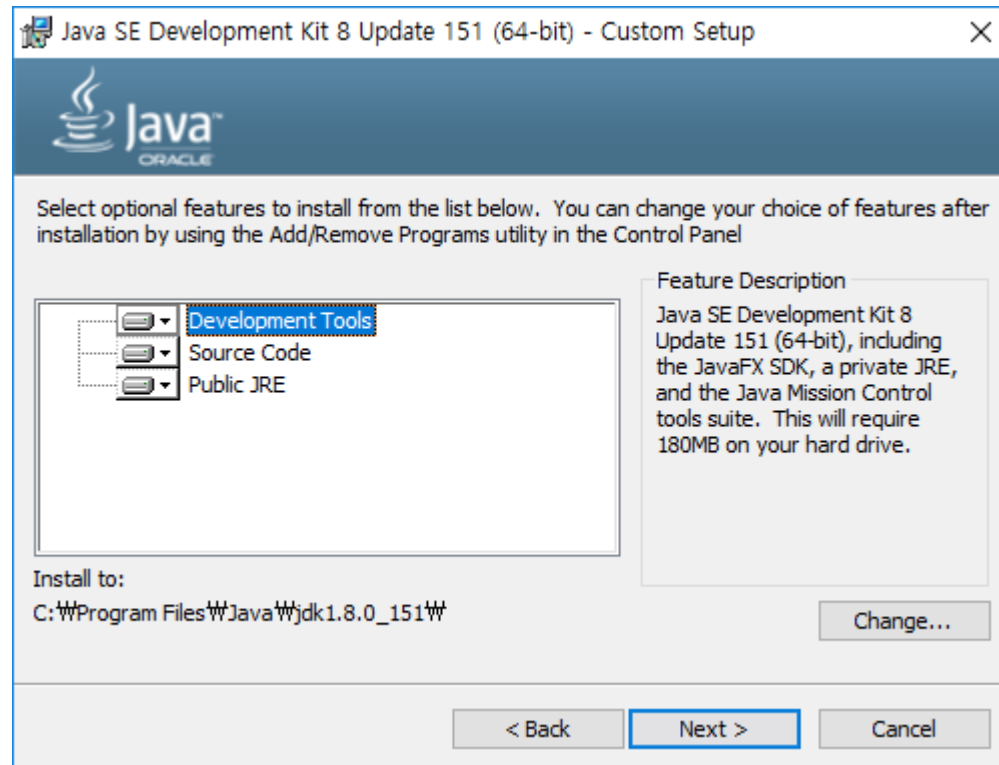
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JDK(Java Development Kit) 설치



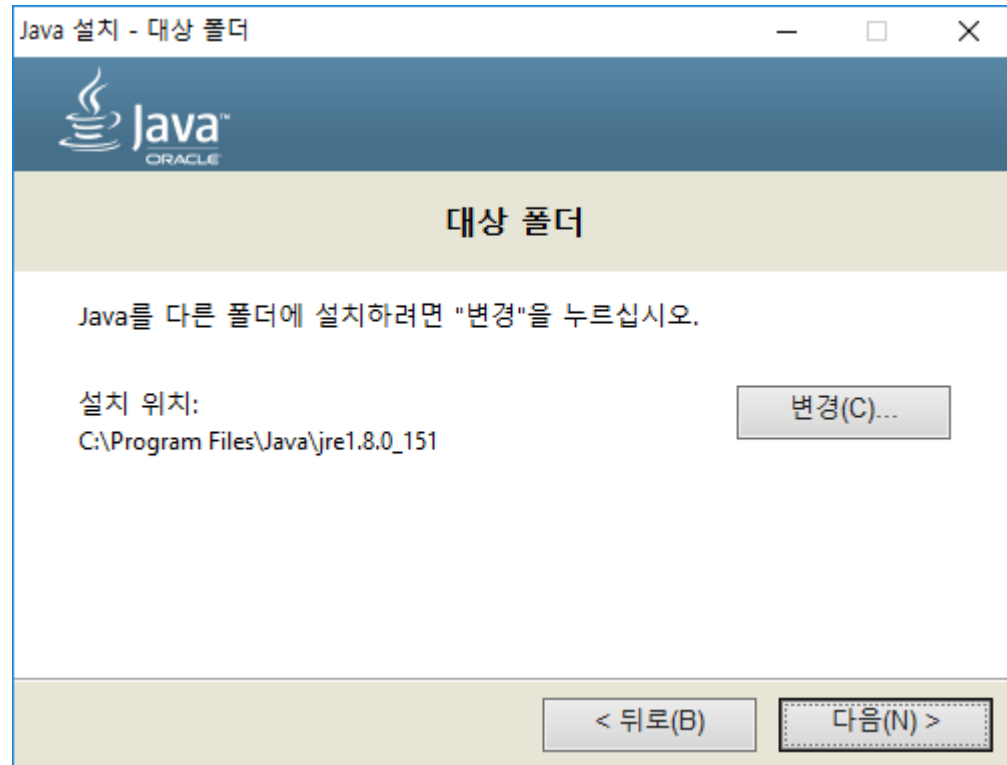
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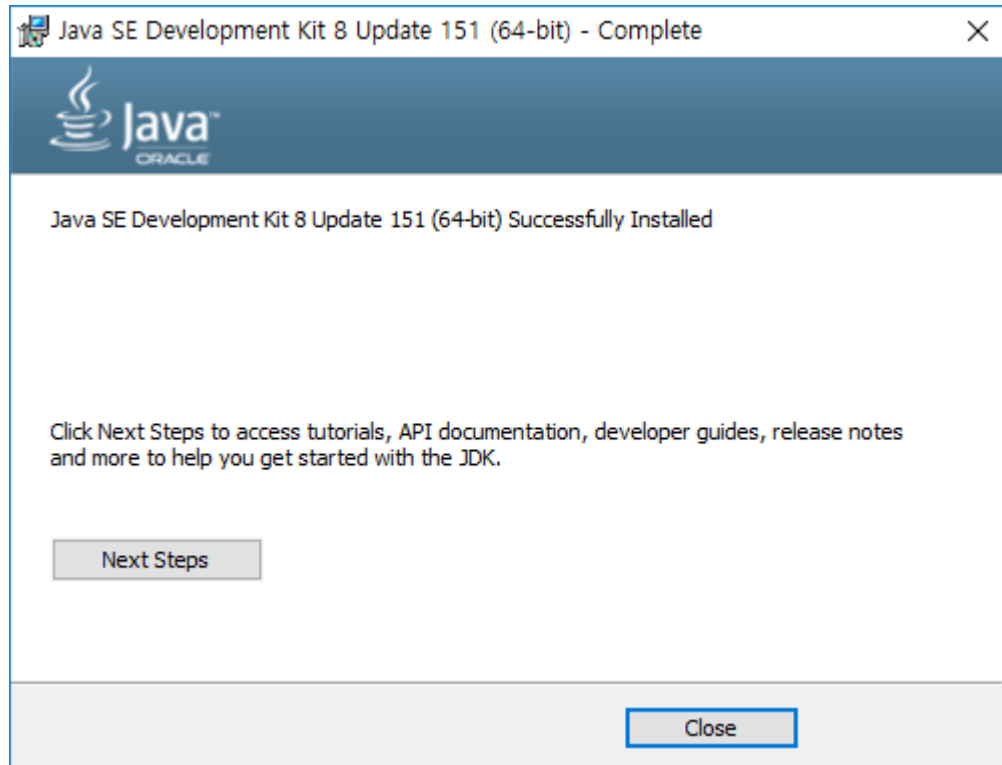
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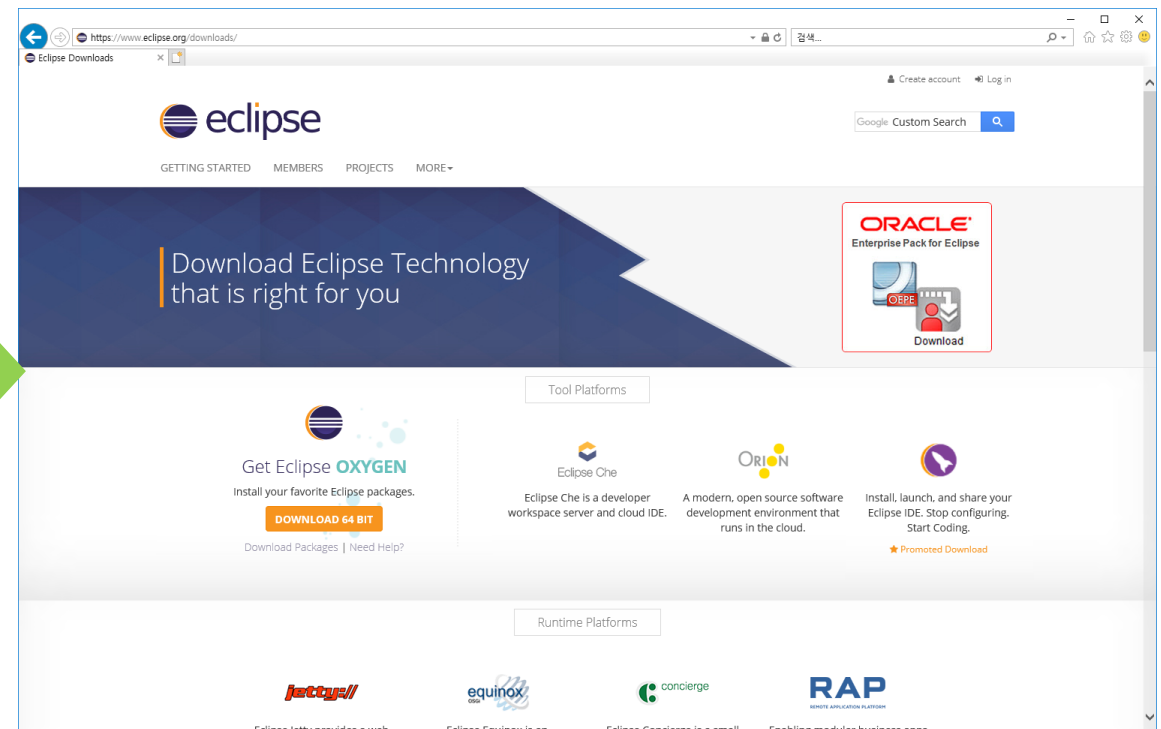
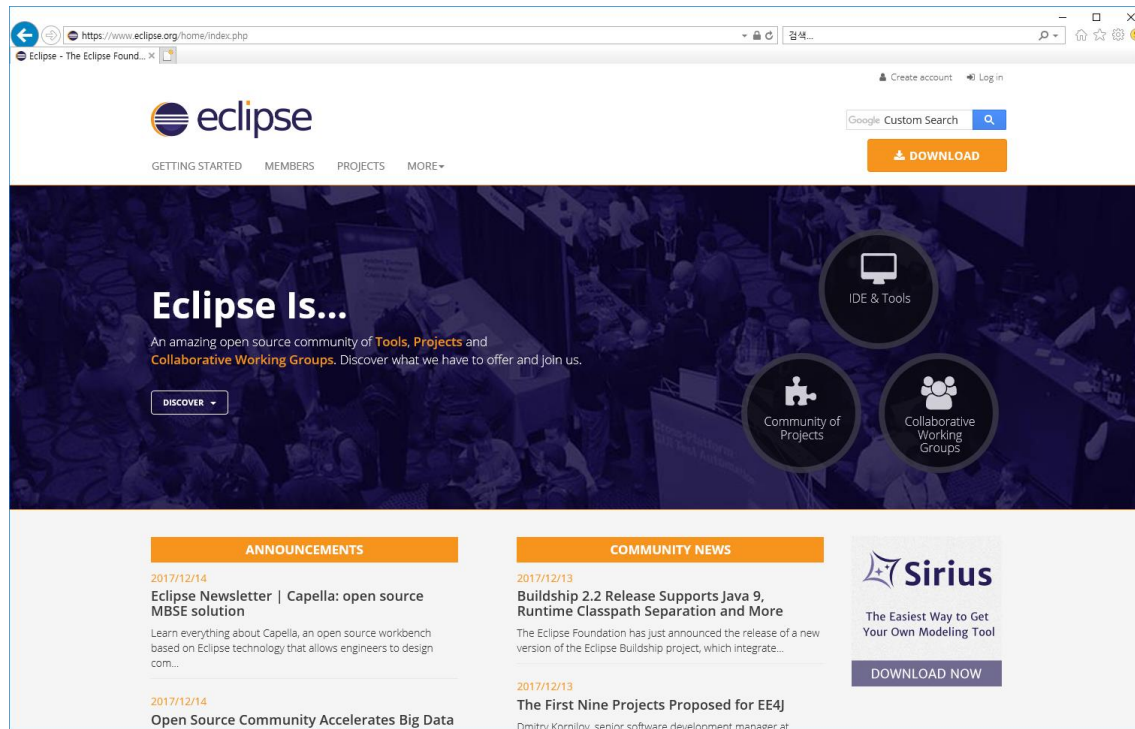
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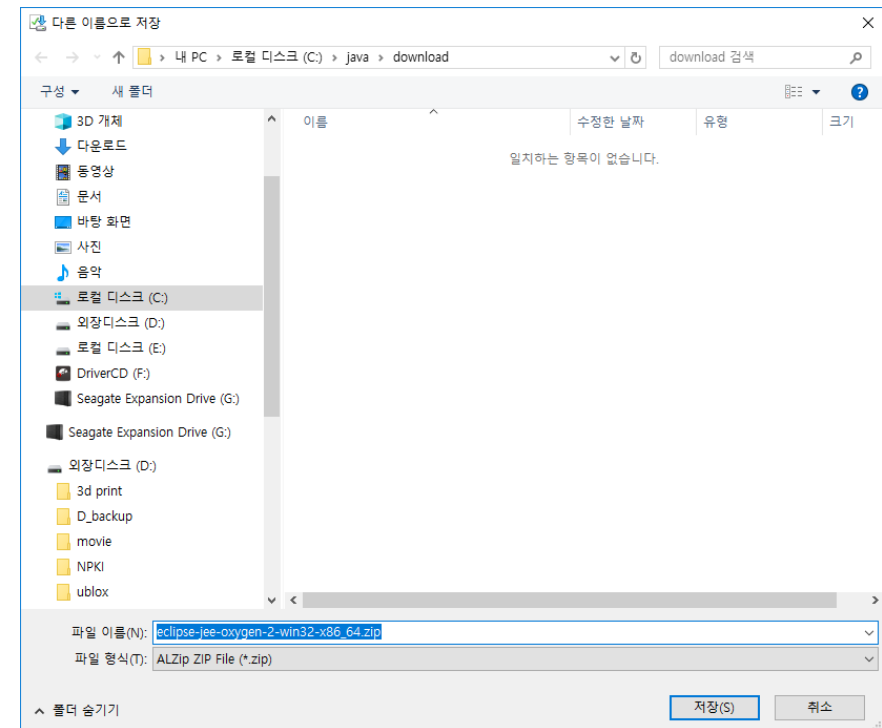
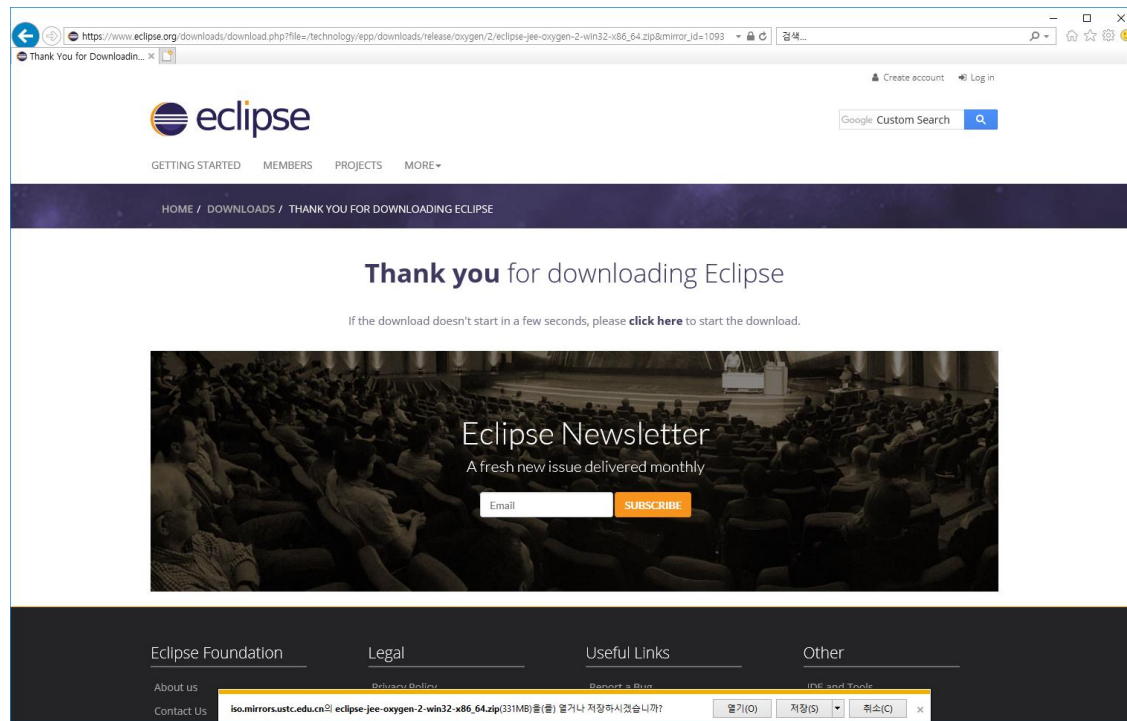
IDE (Integrated Development Environment : 통합개발환경) 설치 - eclipse



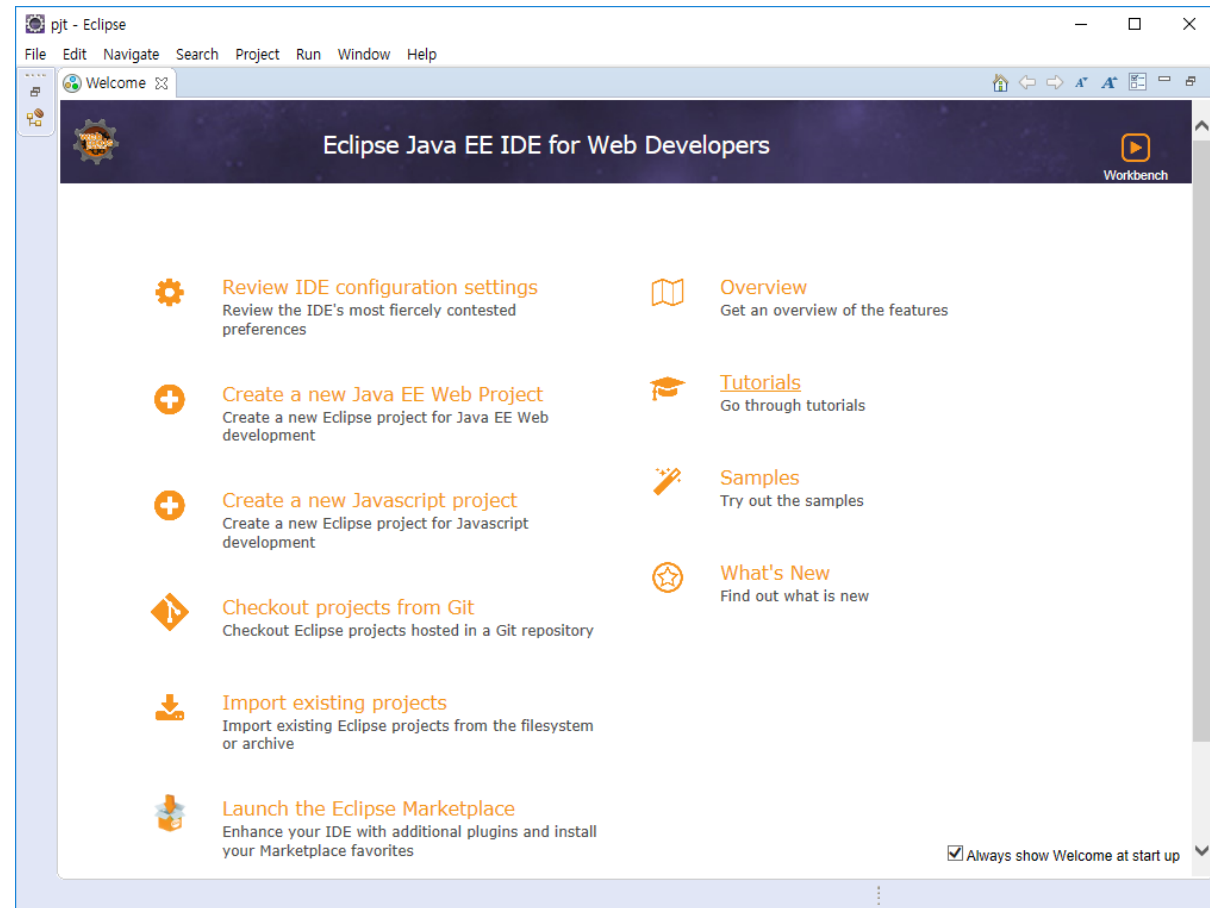
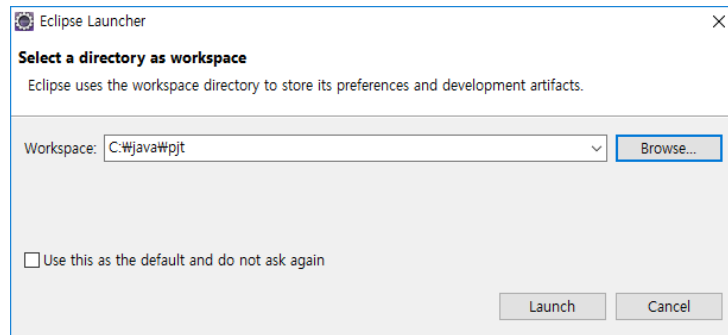


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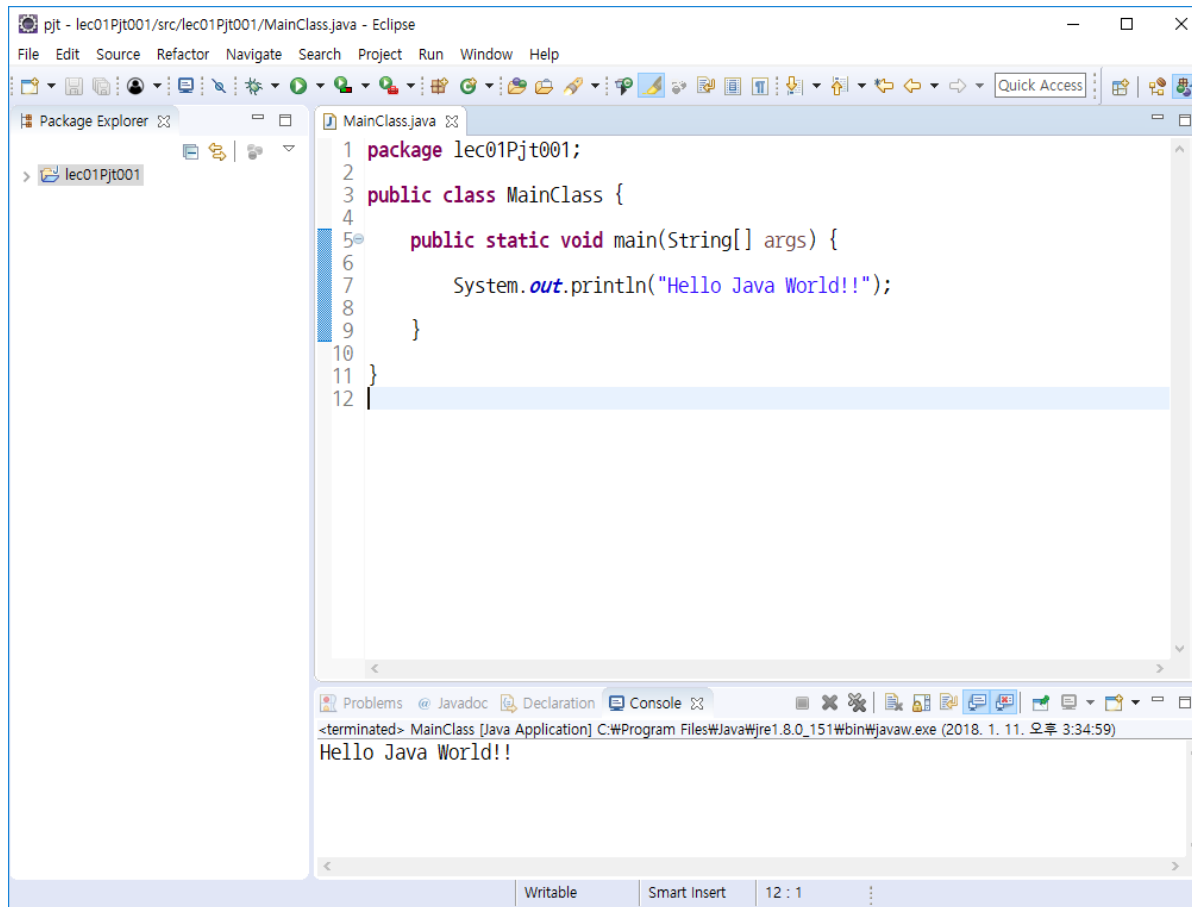
IDE (Integrated Development Environment : 통합개발환경) 설치 - eclipse



1-5 : Hello Java World!!



1-5 : Hello Java World!!



```
1 package lec01Pjt001;
2
3 public class MainClass {
4
5     public static void main(String[] args) {
6         System.out.println("Hello Java World!!");
7     }
8 }
9
10
11
12
```

<terminated> MainClass [Java Application] C:\Program Files\Java\jre1.8.0_151\bin\javaw.exe (2018. 1. 11. 오후 3:34:59)
Hello Java World!!

```
package lec01Pjt001;
```

```
public class MainClass {
```

```
    public static void main(String[] args) {
```

```
        System.out.println("Hello Java World!!");
```

```
    }
```

```
}
```



Hello Java World!!