

Introduction / Java Installation

2020 Spring: AP Computer Science A

December 26th, 2019

Today

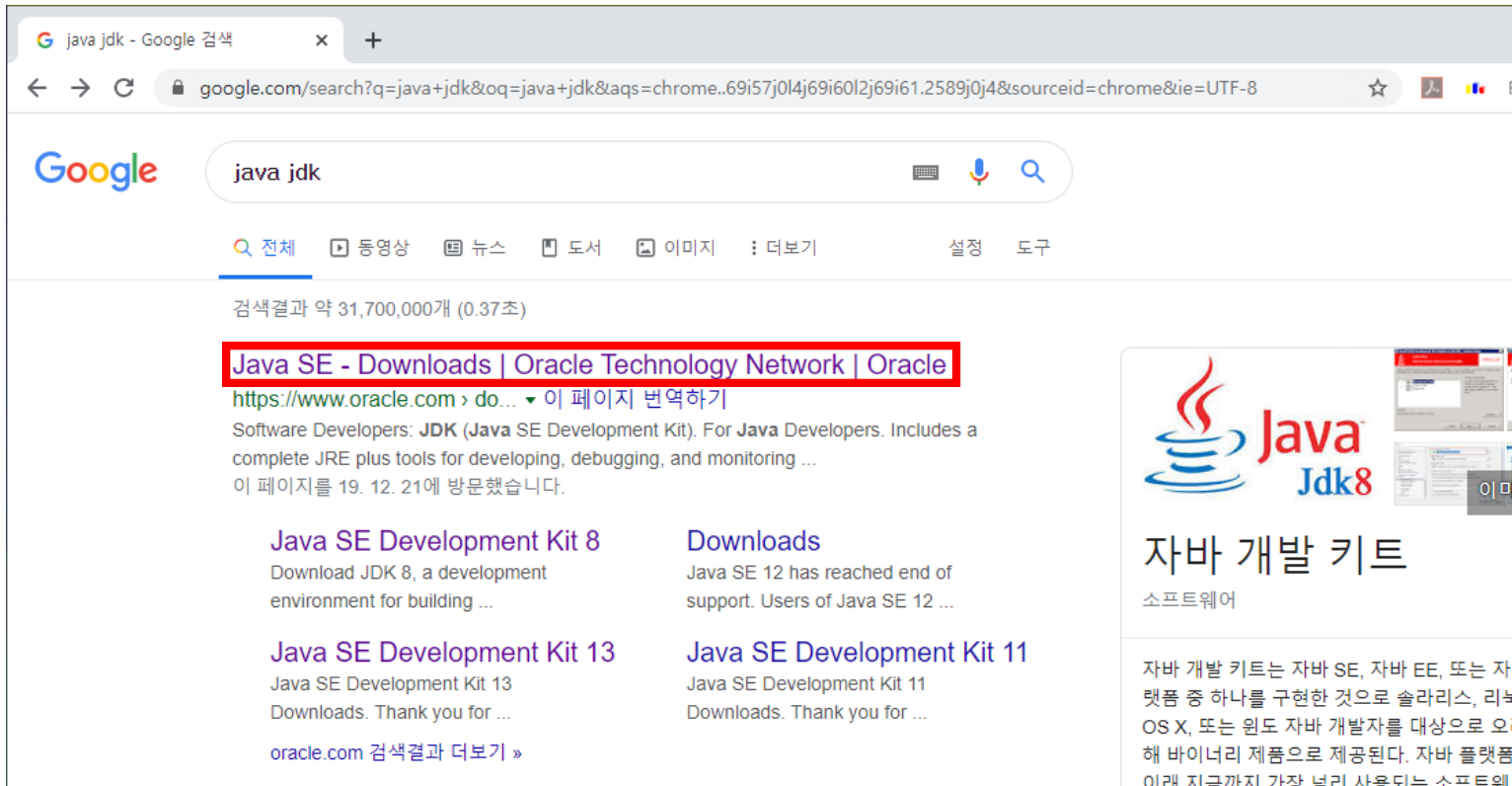
- Introduction
- Java 환경 설치
- Hello, Java!

Introduction

- 강의 계획서 참조!

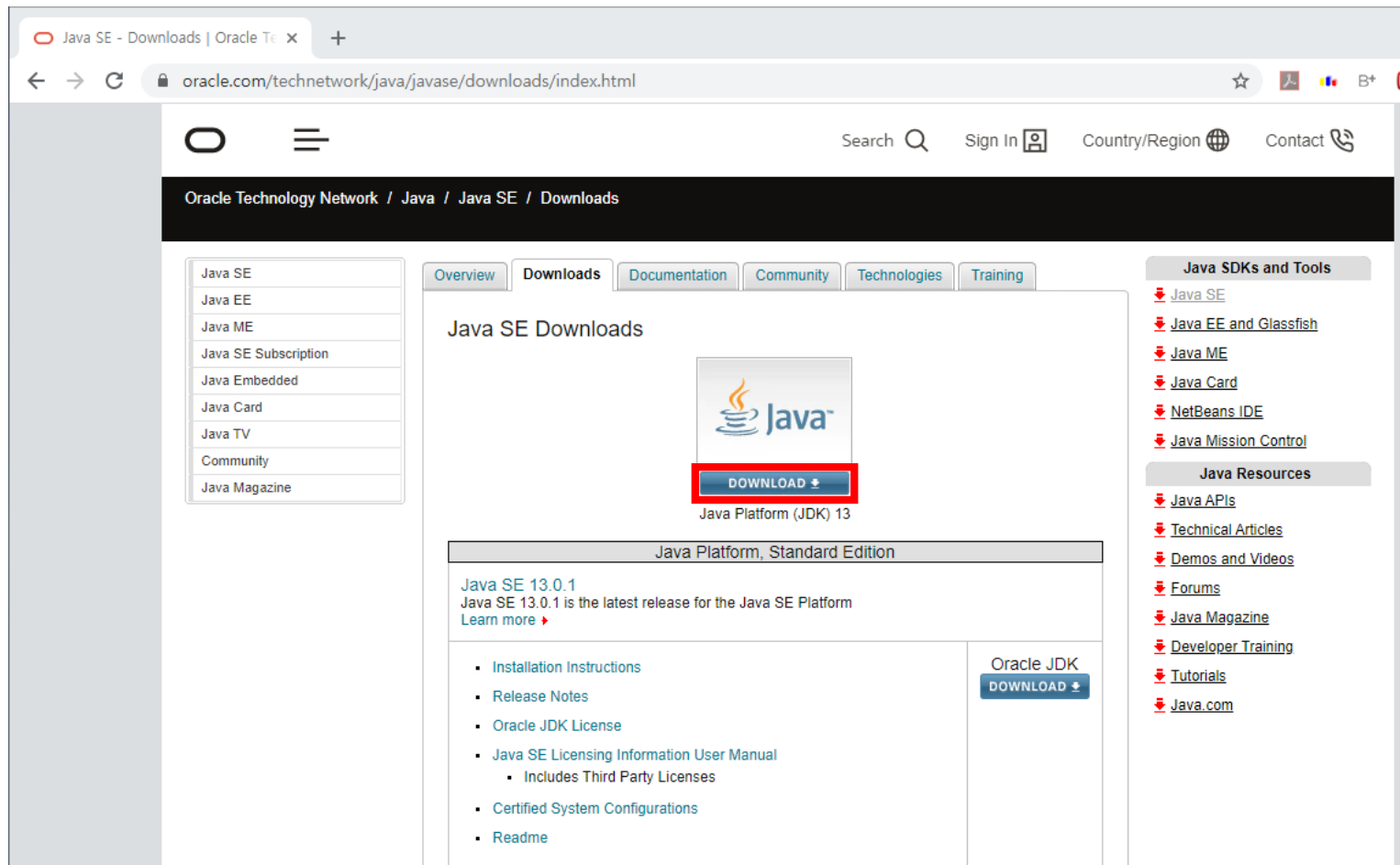
Java Installation

- Google 검색: “java jdk”



Java Installation

■ Click Download on Java Platform (JDK)



The screenshot shows the Oracle Java SE Downloads page. The browser address bar displays `oracle.com/technetwork/java/javase/downloads/index.html`. The page features a navigation bar with the Oracle logo, a search bar, and links for Sign In, Country/Region, and Contact. Below the navigation bar, a breadcrumb trail reads "Oracle Technology Network / Java / Java SE / Downloads".








On the left side, there is a sidebar menu with links to Java SE, Java EE, Java ME, Java SE Subscription, Java Embedded, Java Card, Java TV, Community, and Java Magazine. The main content area has tabs for Overview, Downloads, Documentation, Community, Technologies, and Training. The "Downloads" tab is selected, showing the "Java SE Downloads" section.

In the center of the page, there is a large "DOWNLOAD" button with a red border, which is highlighted. Below this button, it says "Java Platform (JDK) 13". To the right of the main content, there are two sidebars: "Java SDKs and Tools" with links to Java SE, Java EE and Glassfish, Java ME, Java Card, NetBeans IDE, and Java Mission Control; and "Java Resources" with links to Java APIs, Technical Articles, Demos and Videos, Forums, Java Magazine, Developer Training, Tutorials, and Java.com.

Below the "DOWNLOAD" button, there is a section titled "Java Platform, Standard Edition" which includes the text "Java SE 13.0.1" and "Java SE 13.0.1 is the latest release for the Java SE Platform". A list of links is provided: Installation Instructions, Release Notes, Oracle JDK License, Java SE Licensing Information User Manual (which includes Third Party Licenses), Certified System Configurations, and Readme. On the right side of this section, there is another "Oracle JDK DOWNLOAD" button.

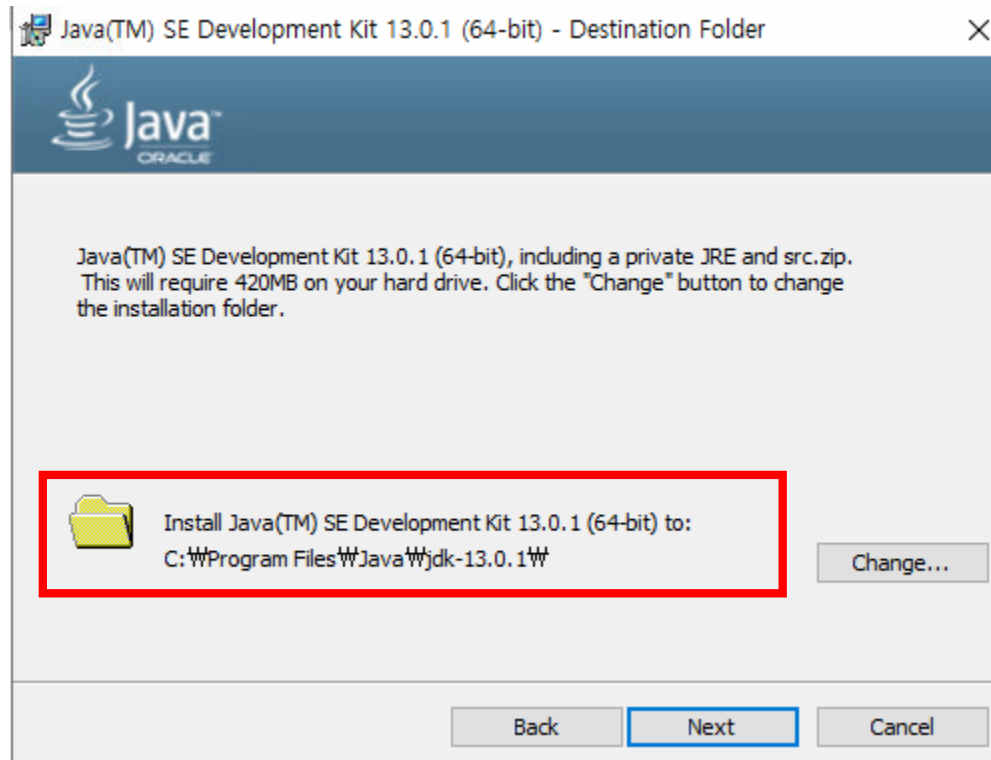
Java Installation

- Accept License Agreement
- 운영체제에 알맞게 선택하여 다운로드 후 실행

Java SE Development Kit 13.0.1		
You must accept the Oracle Technology Network License Agreement for Oracle Java SE to download this software.		
<input type="radio"/> Accept License Agreement <input checked="" type="radio"/> Decline License Agreement		
Product / File Description	File Size	Download
Linux	155.88 MB	 jdk-13.0.1_linux-x64_bin.deb
Linux	163.17 MB	 jdk-13.0.1_linux-x64_bin.rpm
Linux	180 MB	 jdk-13.0.1_linux-x64_bin.tar.gz
macOS	172.78 MB	 jdk-13.0.1_osx-x64_bin.dmg
macOS	173.11 MB	 jdk-13.0.1_osx-x64_bin.tar.gz
Windows	159.84 MB	 jdk-13.0.1_windows-x64_bin.exe
Windows	178.99 MB	 jdk-13.0.1_windows-x64_bin.zip

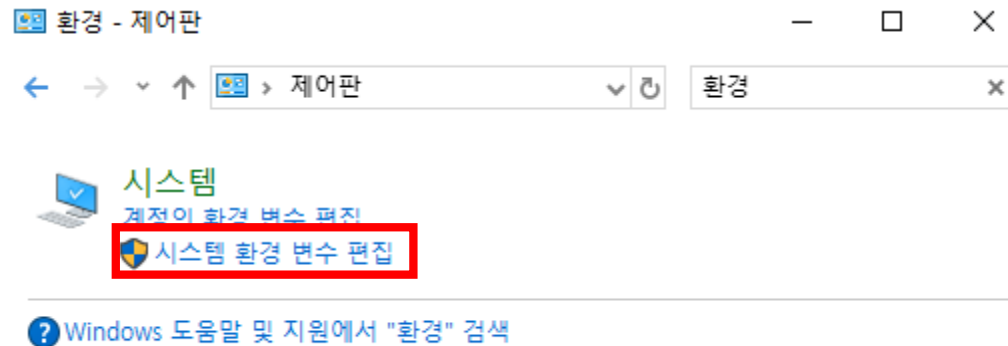
Java Installation

- Java 설치 경로 기억 (중요!!)
 - C:\Program Files\Java\jdk-13.0.1
- 이외의 것들은 Next 로 넘어간다



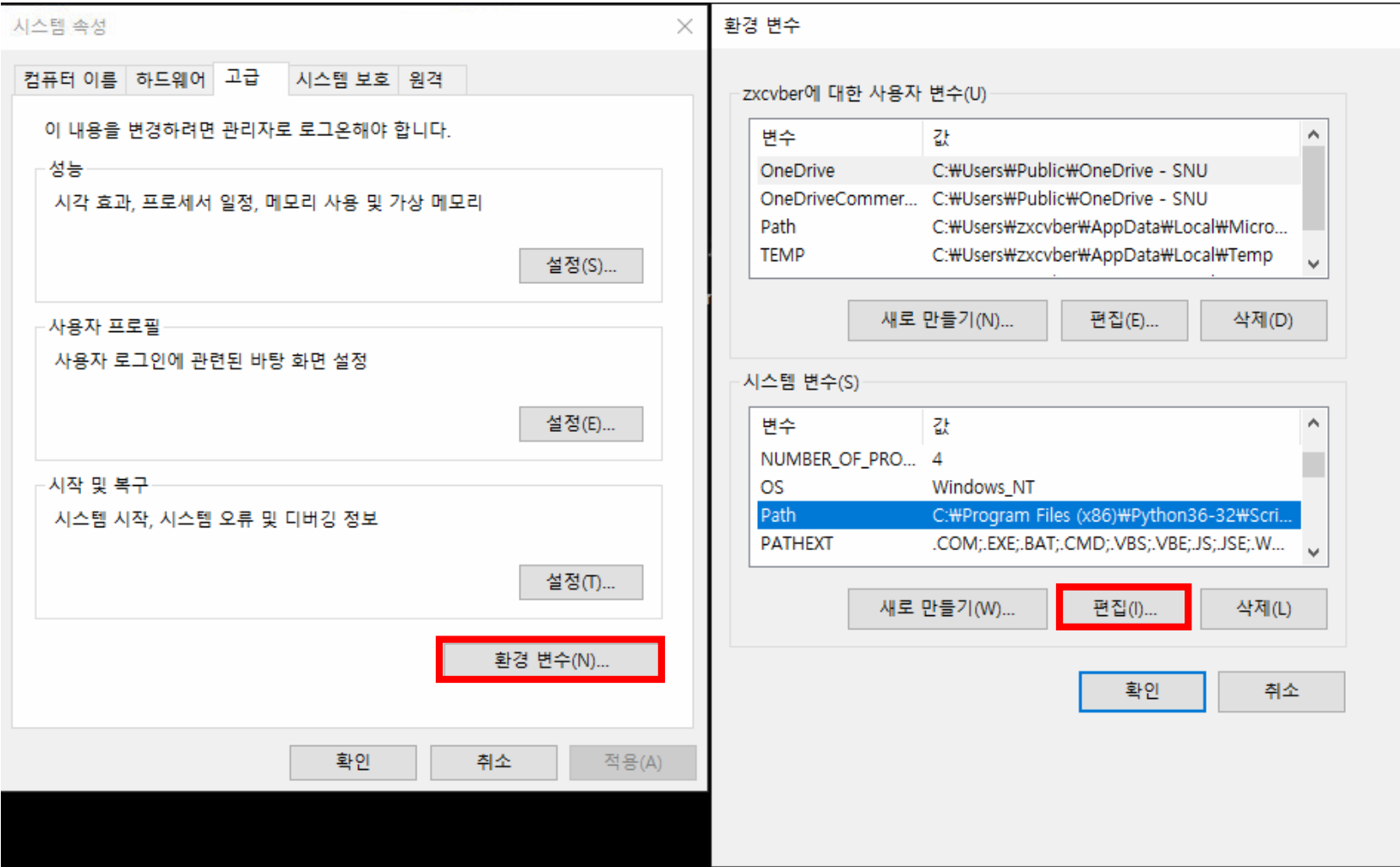
Java Installation

- 시스템 환경 변수 편집 (Environment Variables)
 - 제어판에서 검색



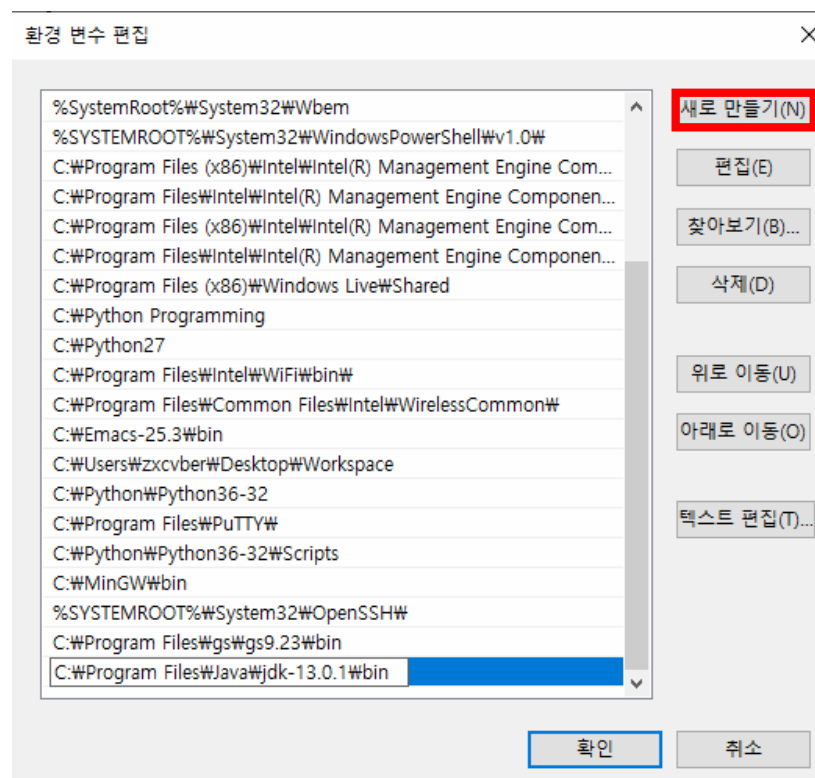
Java Installation

- 환경 변수 > 시스템 변수에서 Path 선택하여 편집



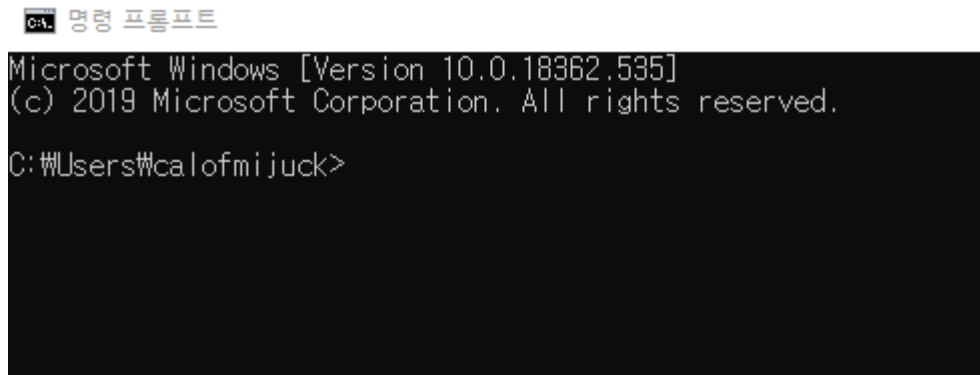
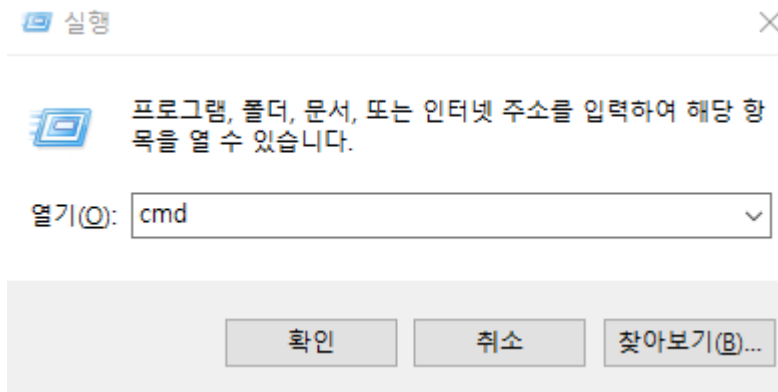
Java Installation

- 새로 만들기 클릭
- Java 설치 경로에 “\bin” 을 붙여 넣은 경로 입력 후 확인
 - C:\Program Files\Java\jdk-13.0.1\bin



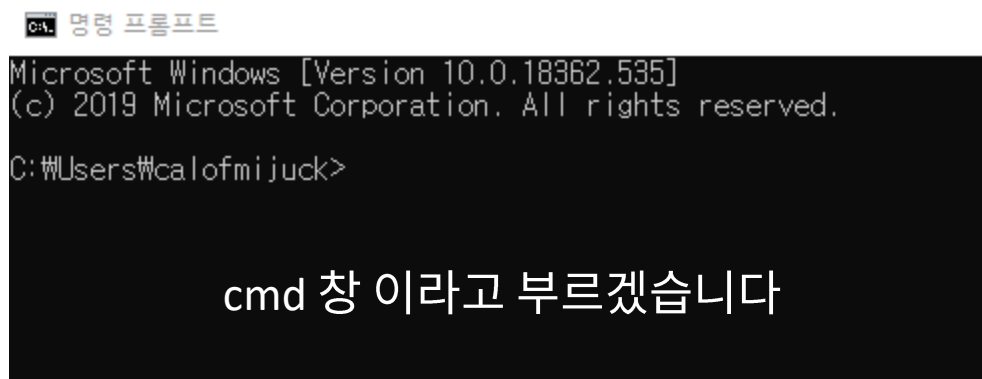
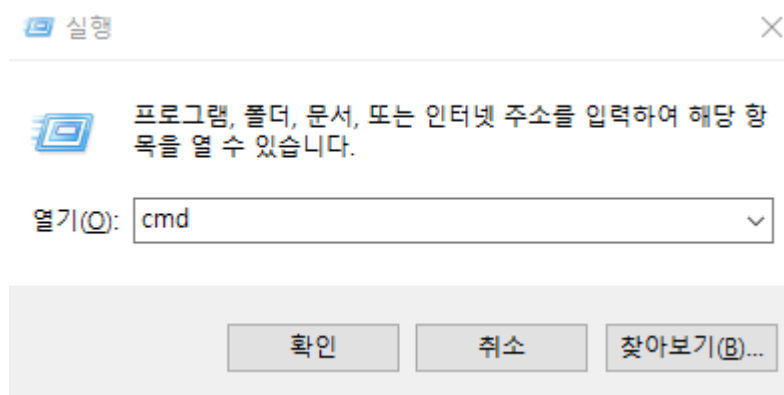
중간 점검

- 모두 “확인” 버튼을 눌러 종료
- Win + R 를 눌러 실행 창을 열고 cmd 입력 후 엔터
 - 이 검은 창의 이름은 **명령 프롬프트**(Command Prompt)



중간 점검

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중간 점검

- cmd 창에 java 를 입력하고 엔터
 - 다음과 같은 메시지가 출력되어야 합니다

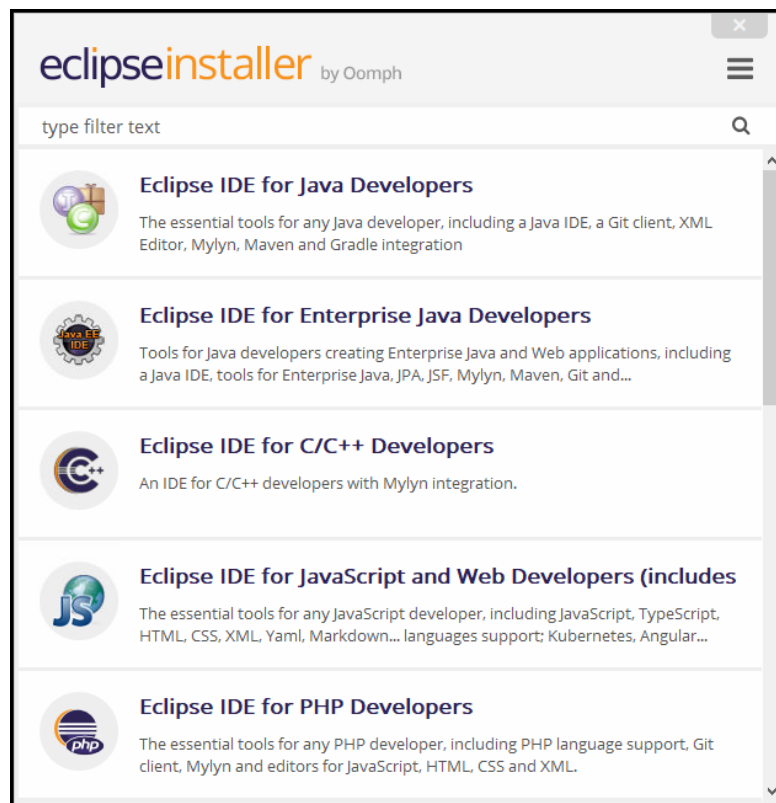
```
C:\Users\calofmi\juck>java
Usage: java [options] <mainclass> [args...]
        (to execute a class)
or java [options] -jar <jarfile> [args...]
        (to execute a jar file)
or java [options] -m <module>[/<mainclass>] [args...]
   java [options] --module <module>[/<mainclass>] [args...]
        (to execute the main class in a module)
or java [options] <sourcefile> [args]
        (to execute a single source-file program)

Arguments following the main class, source file, -jar <jarfile>,
-m or --module <module>/<mainclass> are passed as the arguments to
main class.
```

(후략)

Eclipse IDE Installation

- <https://www.eclipse.org> 에서 설치파일 다운로드
- 설치 파일 실행
- Eclipse IDE for Java Developers 선택 후 Install



Eclipse IDE Installation

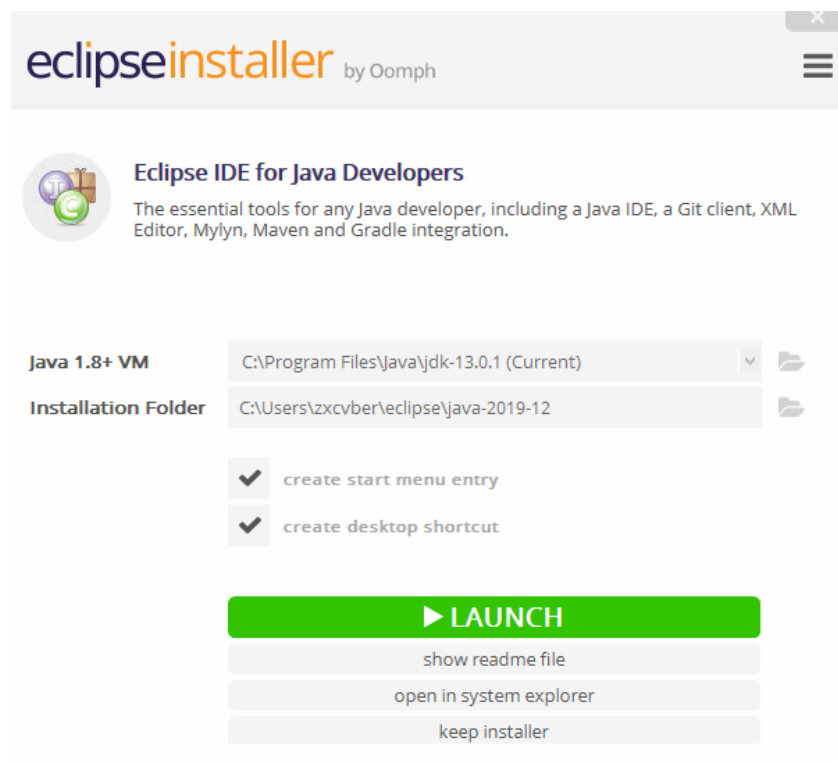
- Java 1.8+ VM 경로가 맞는지 확인하고 설치
 - 약관은 동의하고 넘어갑시다



Eclipse IDE Installation

■ 설치 완료

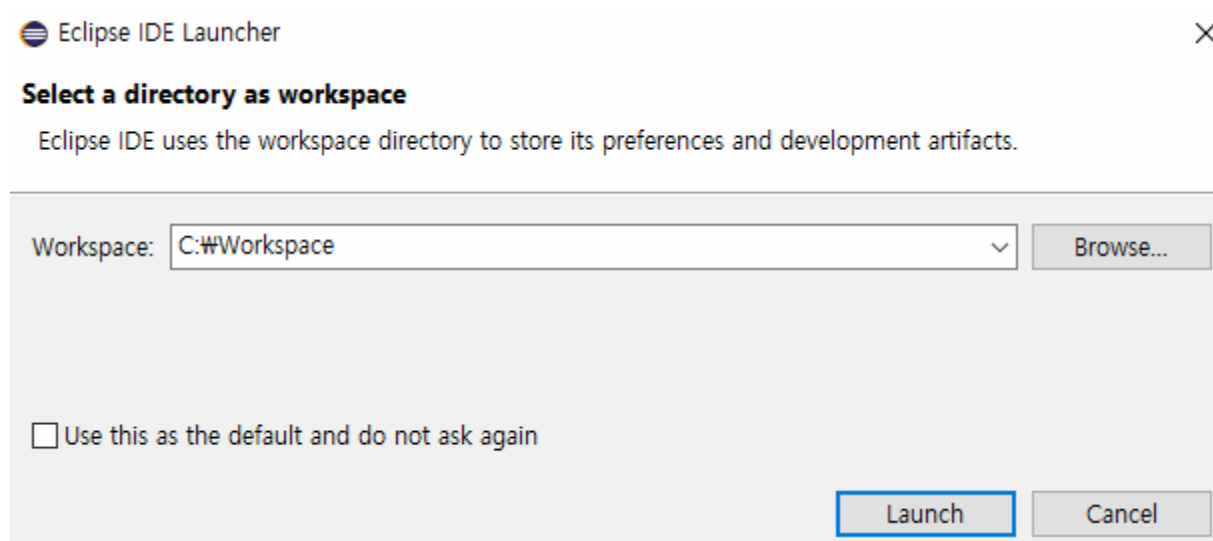
- 바탕화면에 Eclipse IDE 아이콘 생성 확인
- LAUNCH 로 실행



Eclipse IDE Installation

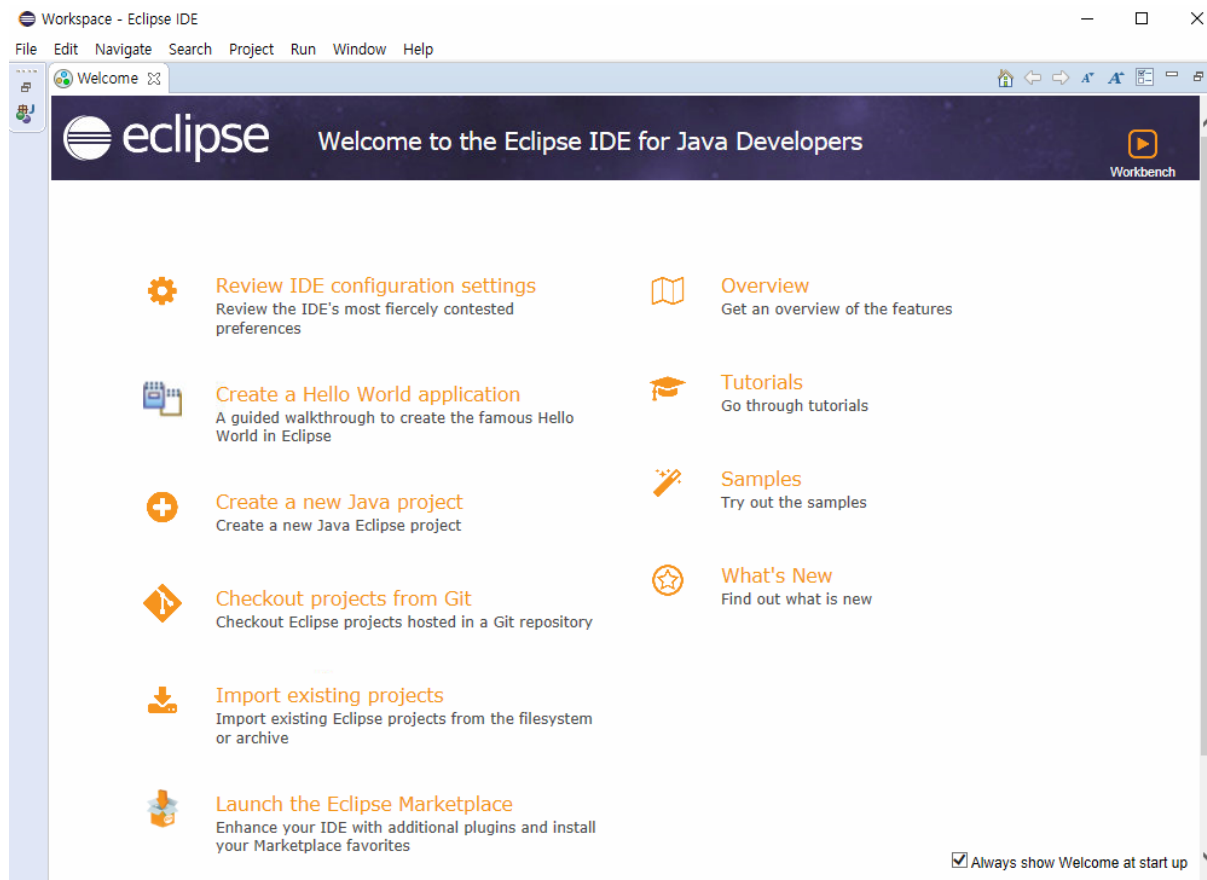
■ Workspace 폴더 설정

- 작업 내역을 모아둘 폴더를 적당히 지정
- Browse 로 폴더 선택 가능
- Launch!



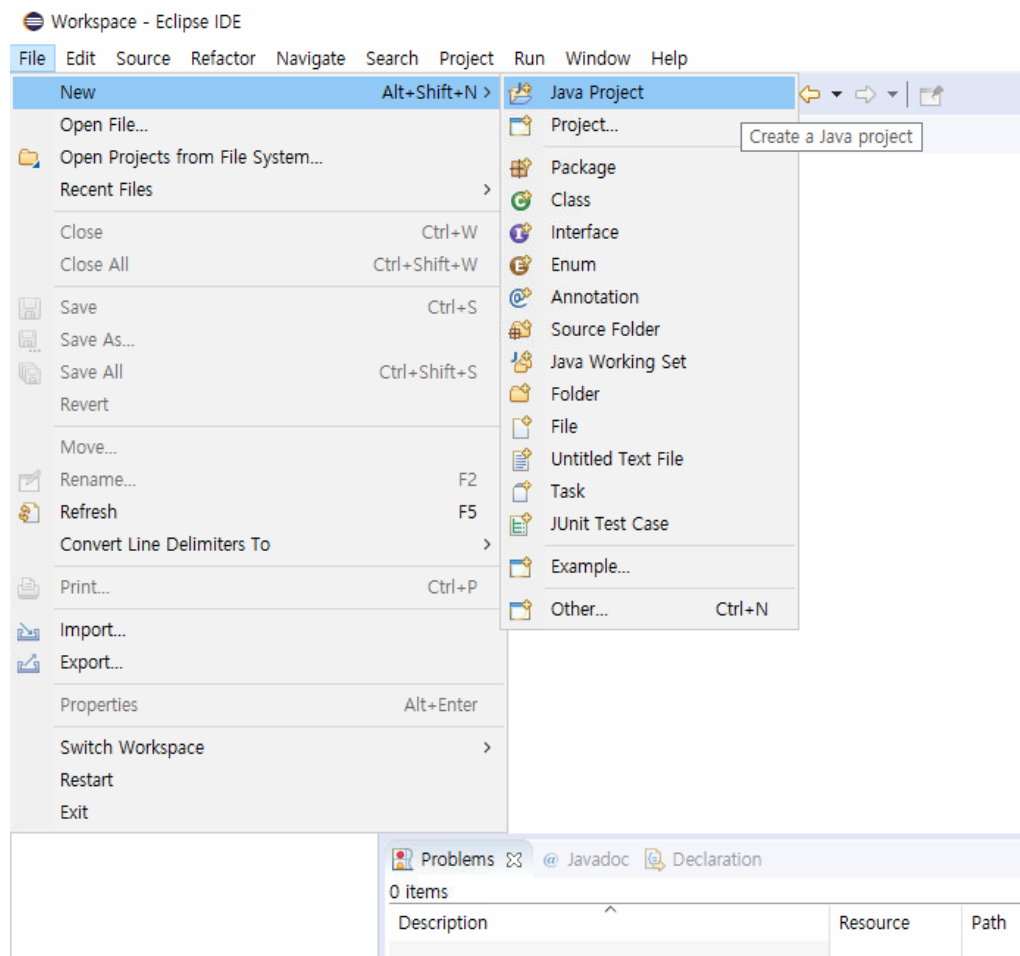
Eclipse IDE Installation

- 다음과 같은 화면이 나오면 설치 성공!
 - Welcome 옆의 x 를 눌러 꺼줍니다!



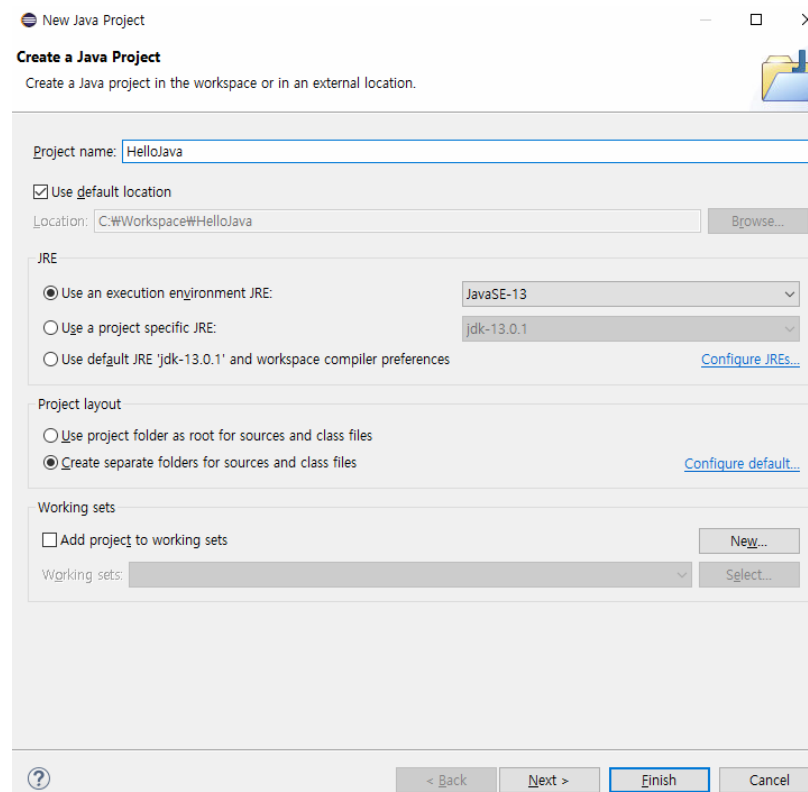
New Java Project

■ File > New > Java Project 선택



New Java Project

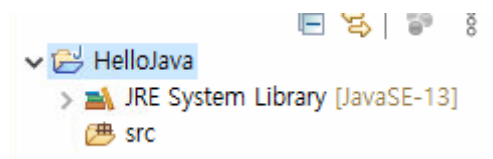
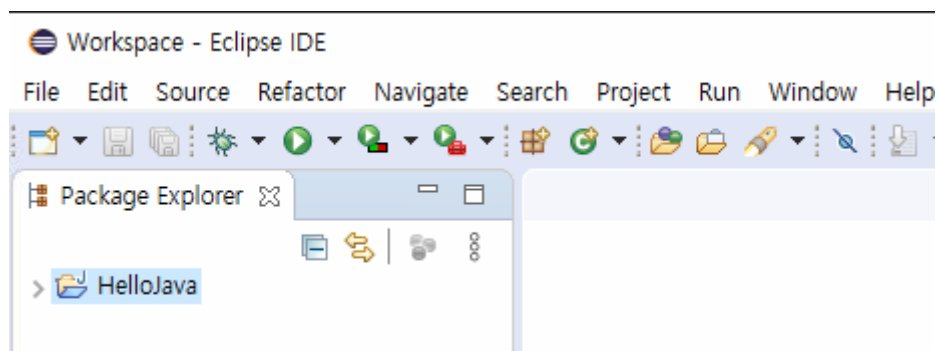
- 프로젝트 이름: HelloJava 로 입력 후 Finish
 - 주의! 앞으로 대소문자는 반드시 구분해 주세요
 - module-info.java 는 생성하지 않습니다



New Java Project

■ 현재 IDE 모습

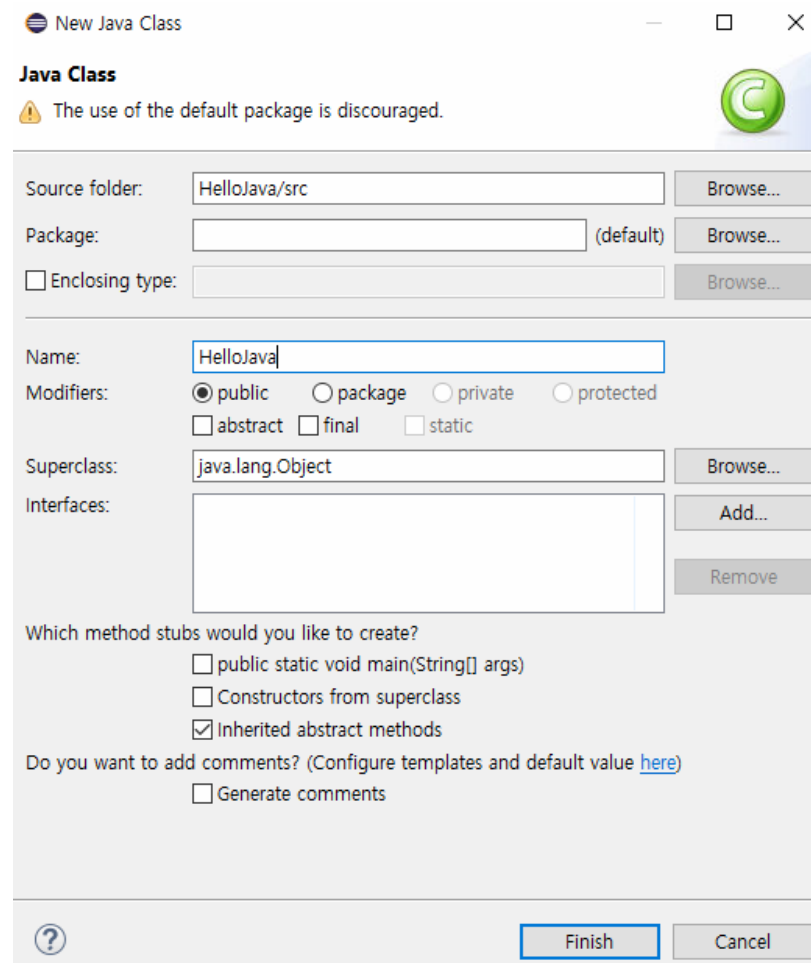
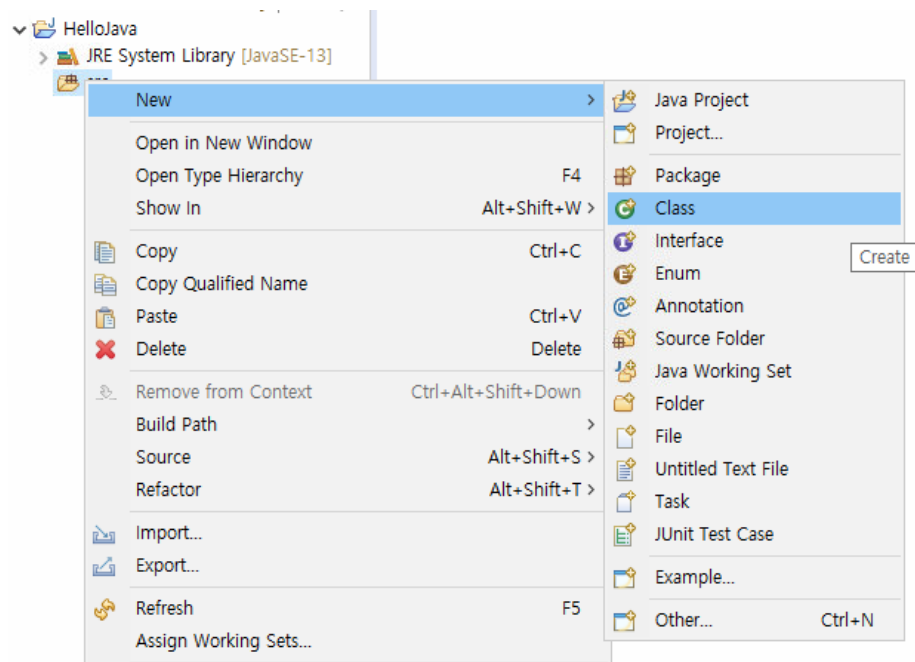
- 폴더 아이콘 옆의 ">" 를 누르면 하위 폴더가 나옵니다



> 클릭 시 모습

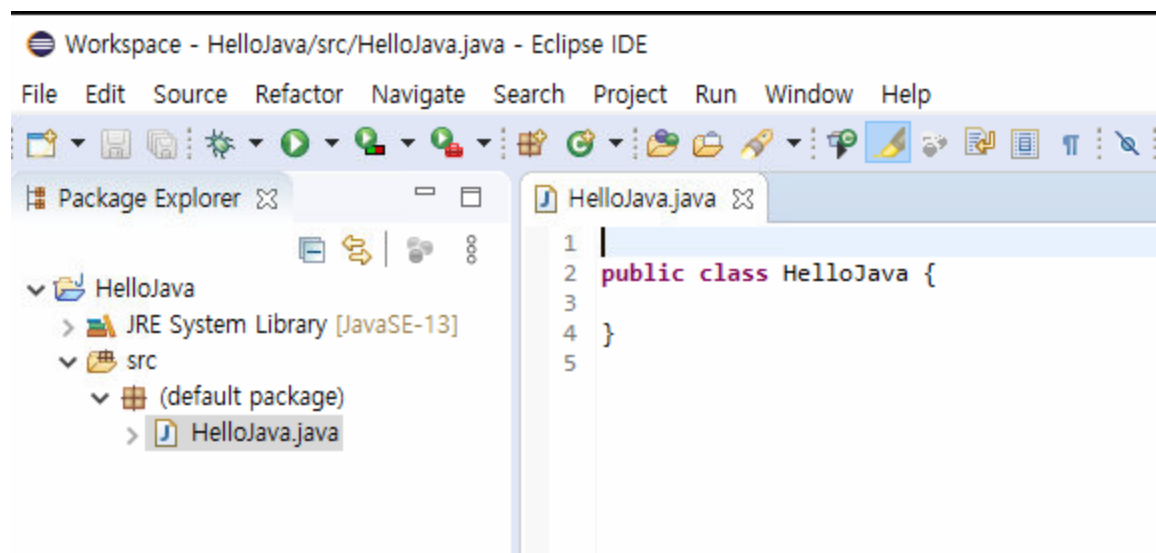
Hello, Java!

- src 를 오른쪽 마우스 클릭
 - New > Class 선택
 - 이름: HelloJava
 - Finish



Hello, Java!

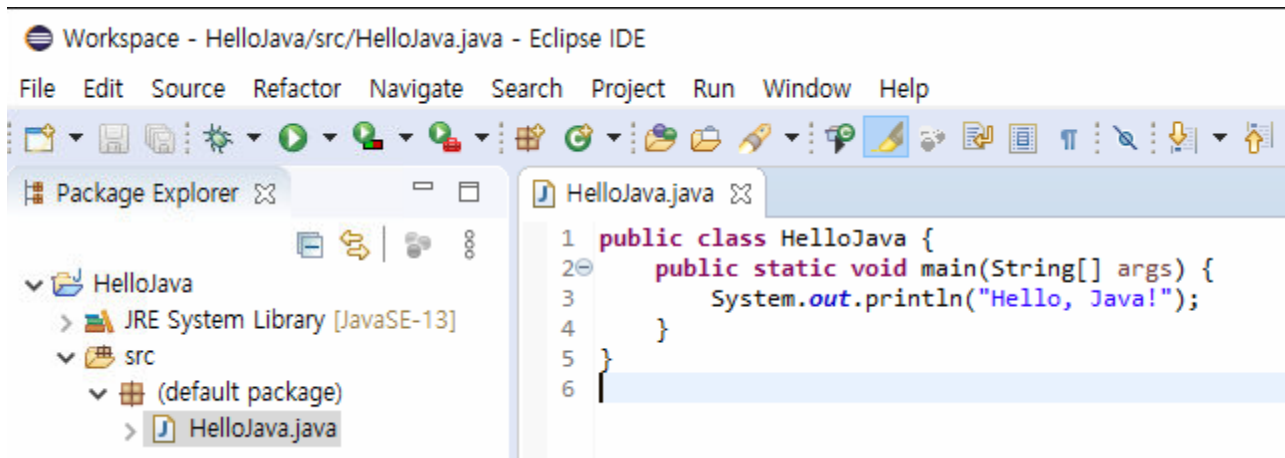
■ 현재 IDE 모습



Hello, Java!

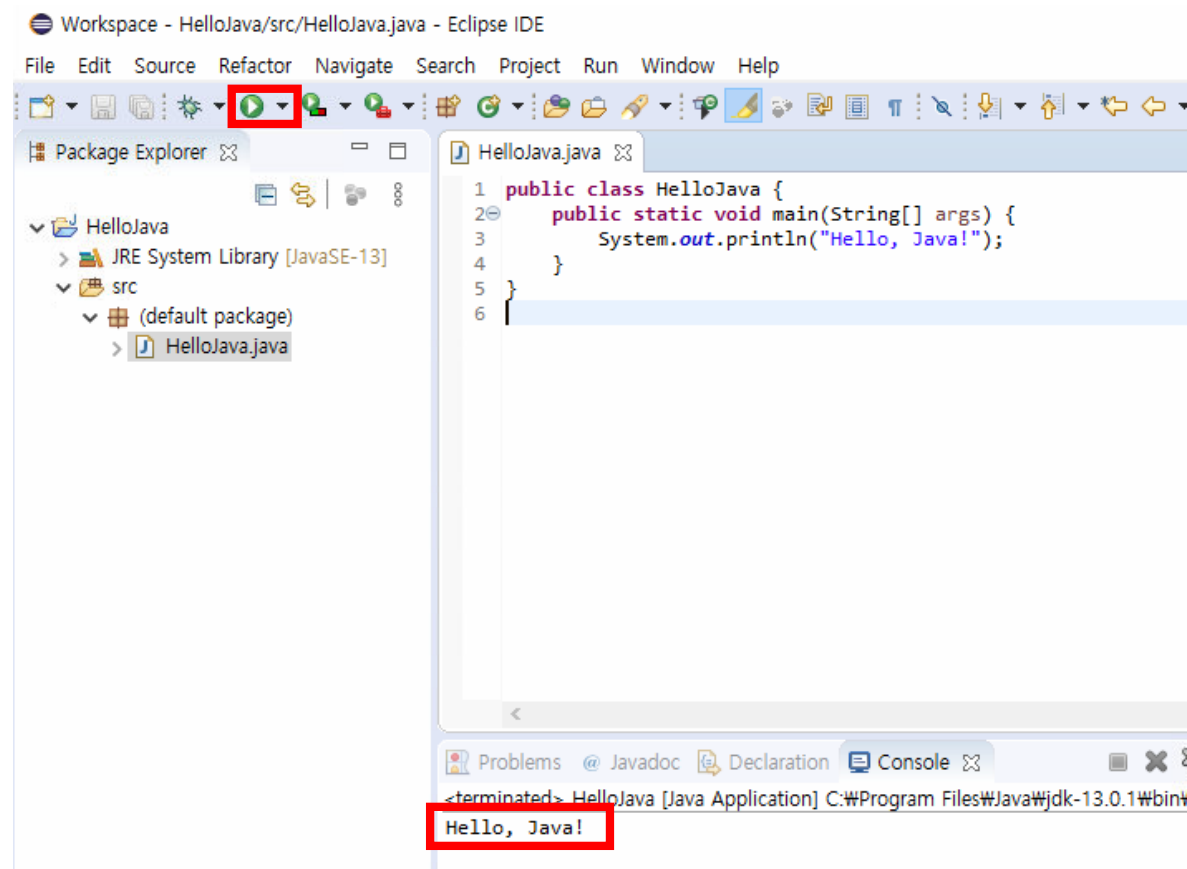
- HelloJava.java 를 다음 코드로 채워줍니다


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



Hello, Java!

- 왼쪽 위의 실행 버튼으로 코드를 실행하고
- Console 에 “Hello, Java!” 가 출력되는지 확인!



 로 코드 실행

← 출력 결과 확인