# Object – Oriented Programming

## LAB #1. ECLIPSE

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2) Schedule

3) Install Eclipse

4) GitLab

# Introduction

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  - Office : IT/BT #402-2
  - E-mail : lhs9394@naver.com

# Schedule

| Week | Lecture | Lab |
|---|---|---|
| 1 | Course Overview | Eclipse IDE |
| 2 | Getting Started (ch. 1)<br>Console Input and Output (ch. 2) | Flow of Control(ch.3) |
| 3 | Defining Classes I (ch. 4) | Git & GitLab |
| 4 | Defining Classes II (ch. 5) | UML |
| 5 | Defining Classes II (ch. 5) | |
| 6 | Arrays (ch. 6) | |
| 7 | Inheritance (ch. 7) | Quiz 1 |
| 8 | Midterm exam | Buddha's Birthday |

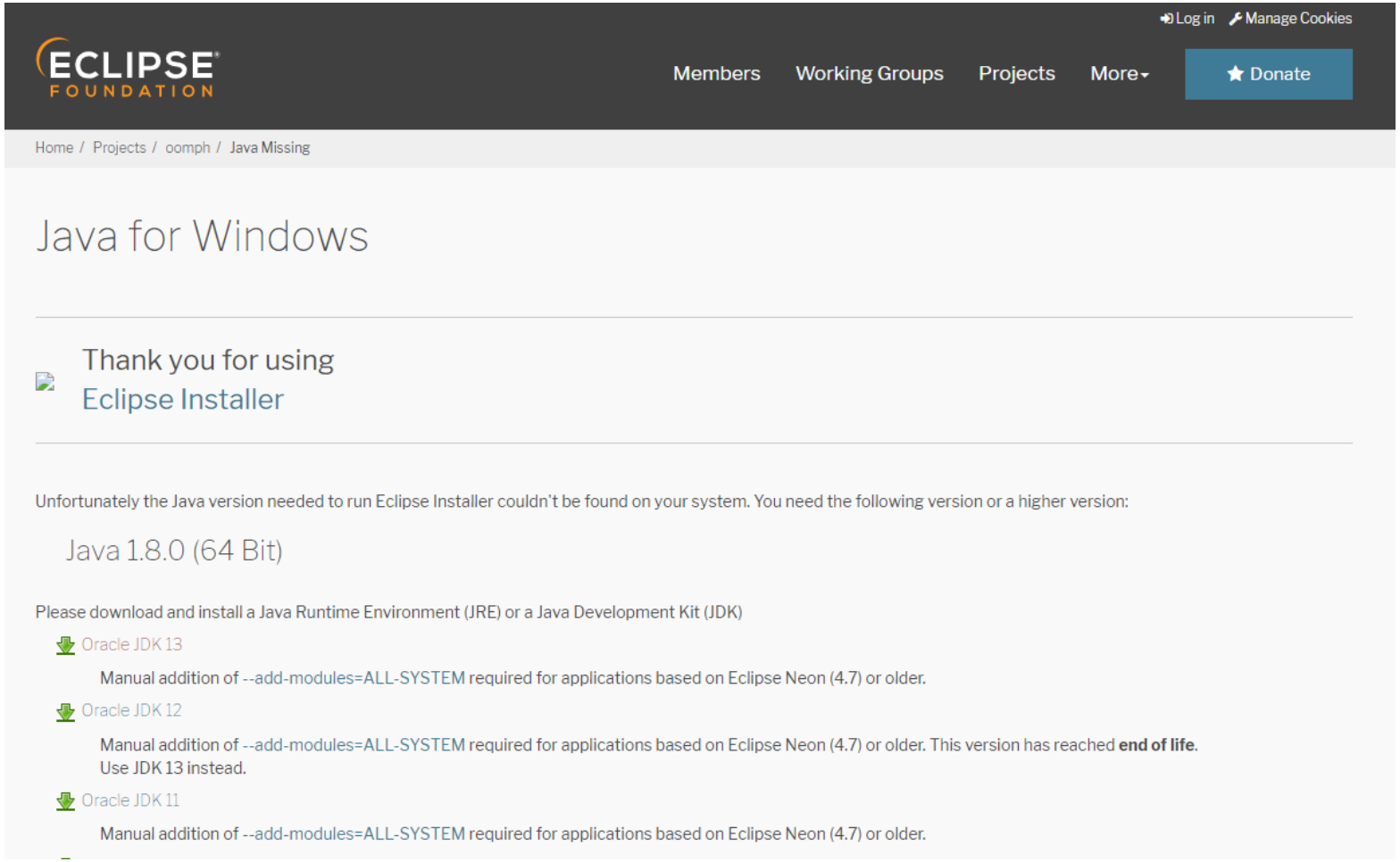
# Schedule

| Week | Lecture | Lab |
|---|---|---|
| 9 | Polymorphism and Abstract Classes (ch. 8) | |
| 10 | Exception Handling (ch. 9) | File I/O |
| 11 | Interface and Inner Classes (ch. 13) | Java Thread |
| 12 | Generics and the ArrayList Class (ch. 14) | Quiz 2 |
| 13 | Design Patterns: Intro, Singleton | |
| 14 | Design Patterns: Observer, Decorator | |
| 15 | Final Exam | |

# Install Eclipse

# Install Eclipse - JDK

https://download.eclipse.org/oomph/jre/



# Install Eclipse - JDK

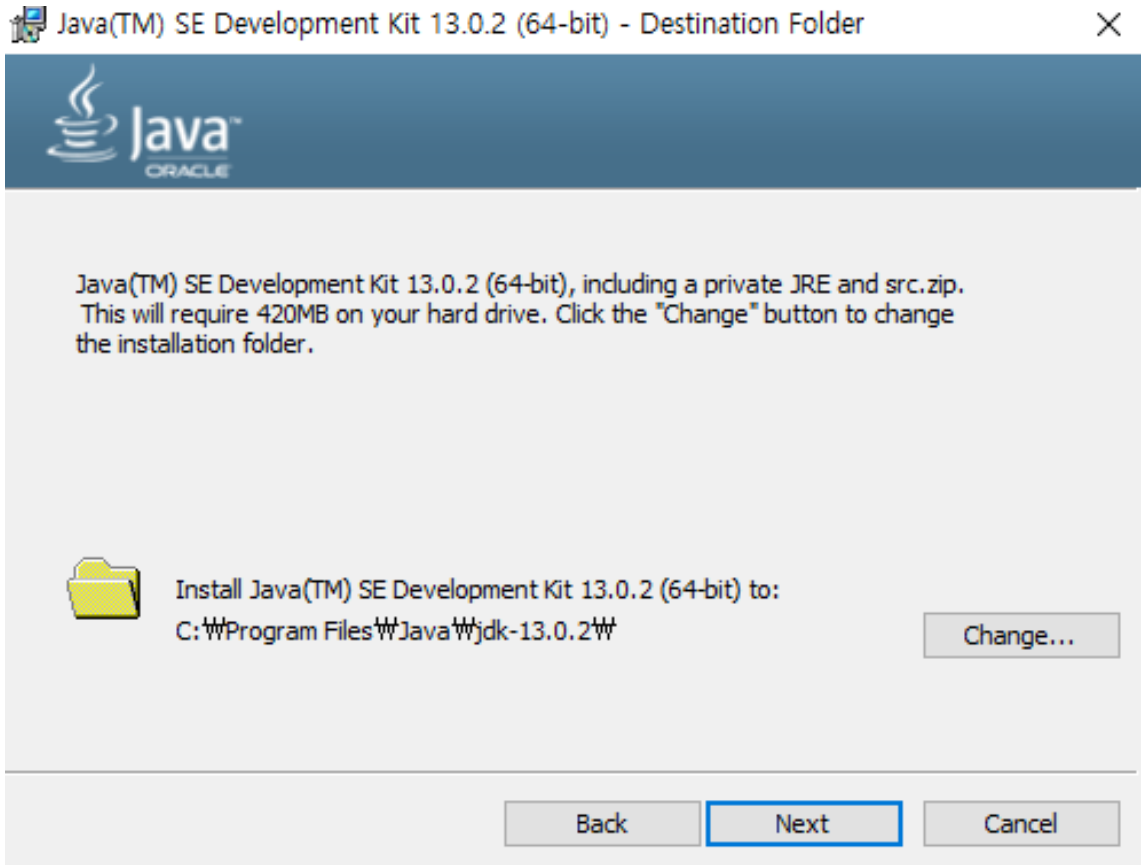
## Java SE Development Kit 13.0.2

This software is licensed under the Oracle Technology Network License Agreement for Oracle Java SE

| Product / File Description | File Size | Download |
|---|---|---|
| Linux Debian Package | 155.72 MB | jdk-13.0.2_linux-x64_bin.deb |
| Linux RPM Package | 162.66 MB | jdk-13.0.2_linux-x64_bin.rpm |
| Linux Compressed Archive | 179.41 MB | jdk-13.0.2_linux-x64_bin.tar.gz |
| macOS Installer | 173.3 MB | jdk-13.0.2_osx-x64_bin.dmg |
| macOS Compressed Archive | 173.7 MB | jdk-13.0.2_osx-x64_bin.tar.gz |
| Windows x64 Installer | 159.83 MB | jdk-13.0.2_windows-x64_bin.exe |
| Windows x64 Compressed Archive | 178.99 MB | jdk-13.0.2_windows-x64_bin.zip |

# Install Eclipse - JDK

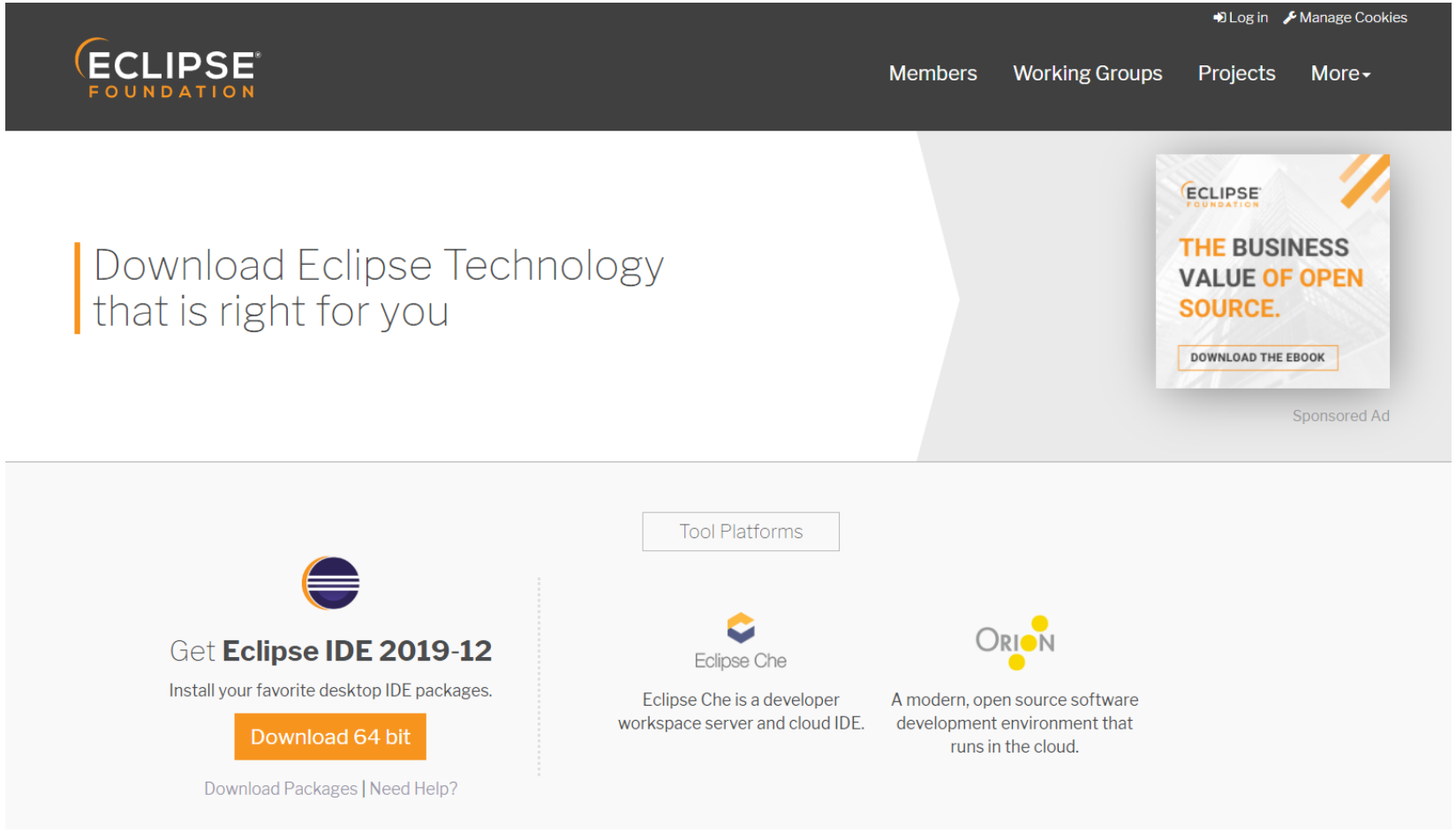
# Install Eclipse - JDK



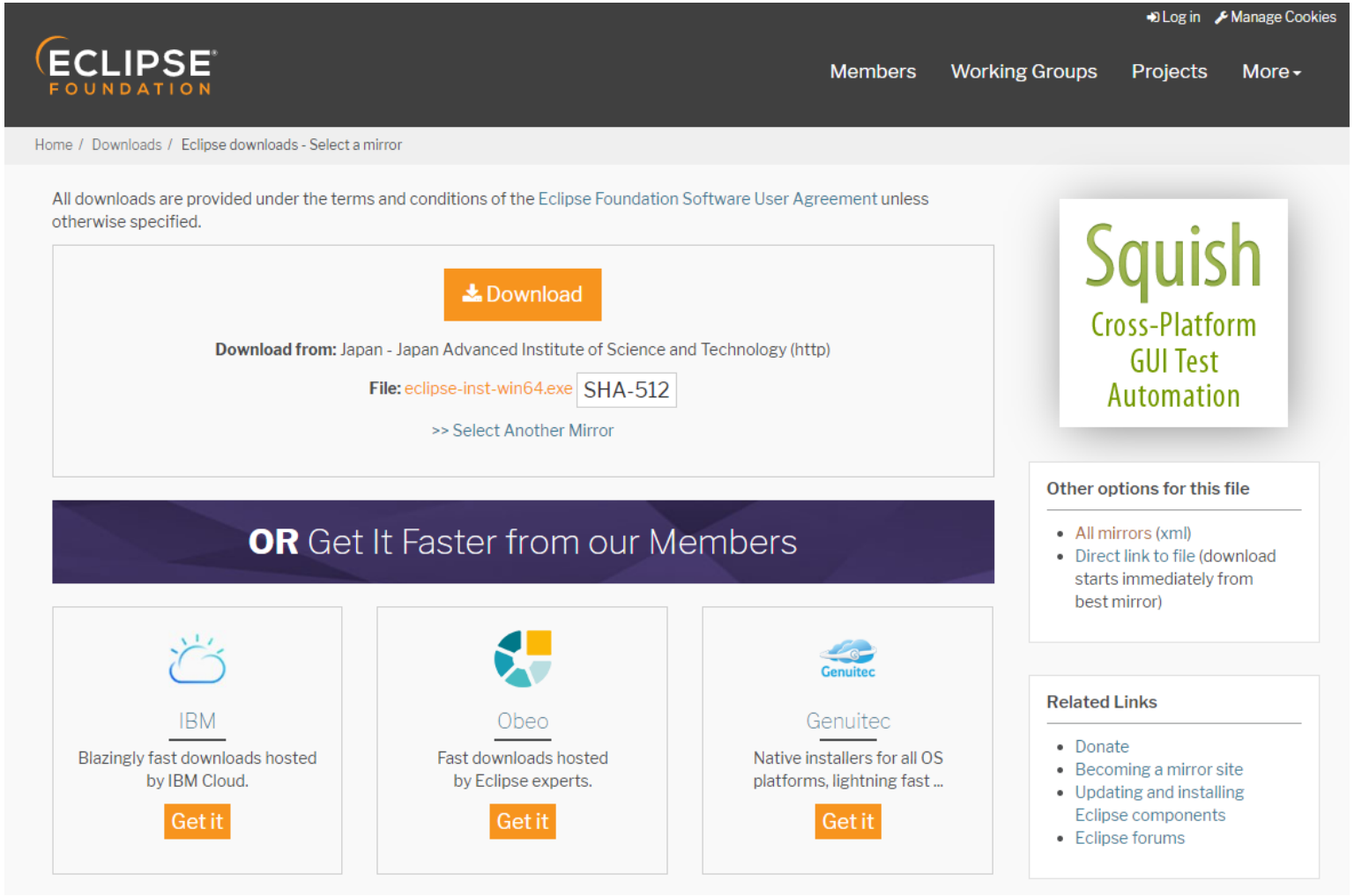
# Install Eclipse - JDK

# Install Eclipse

https://www.eclipse.org/downloads/



# Install Eclipse



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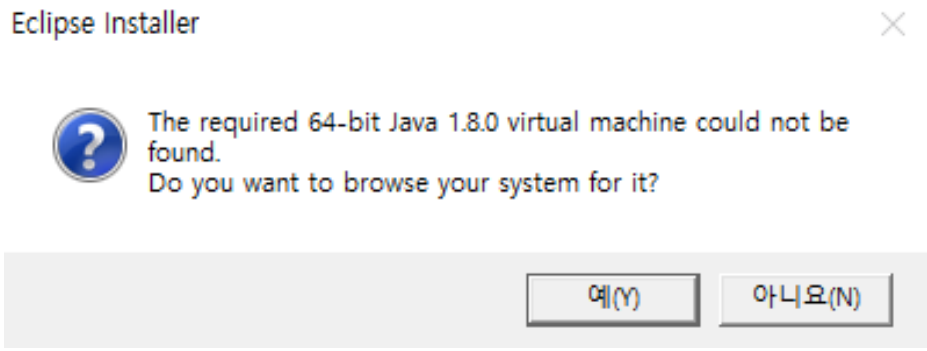

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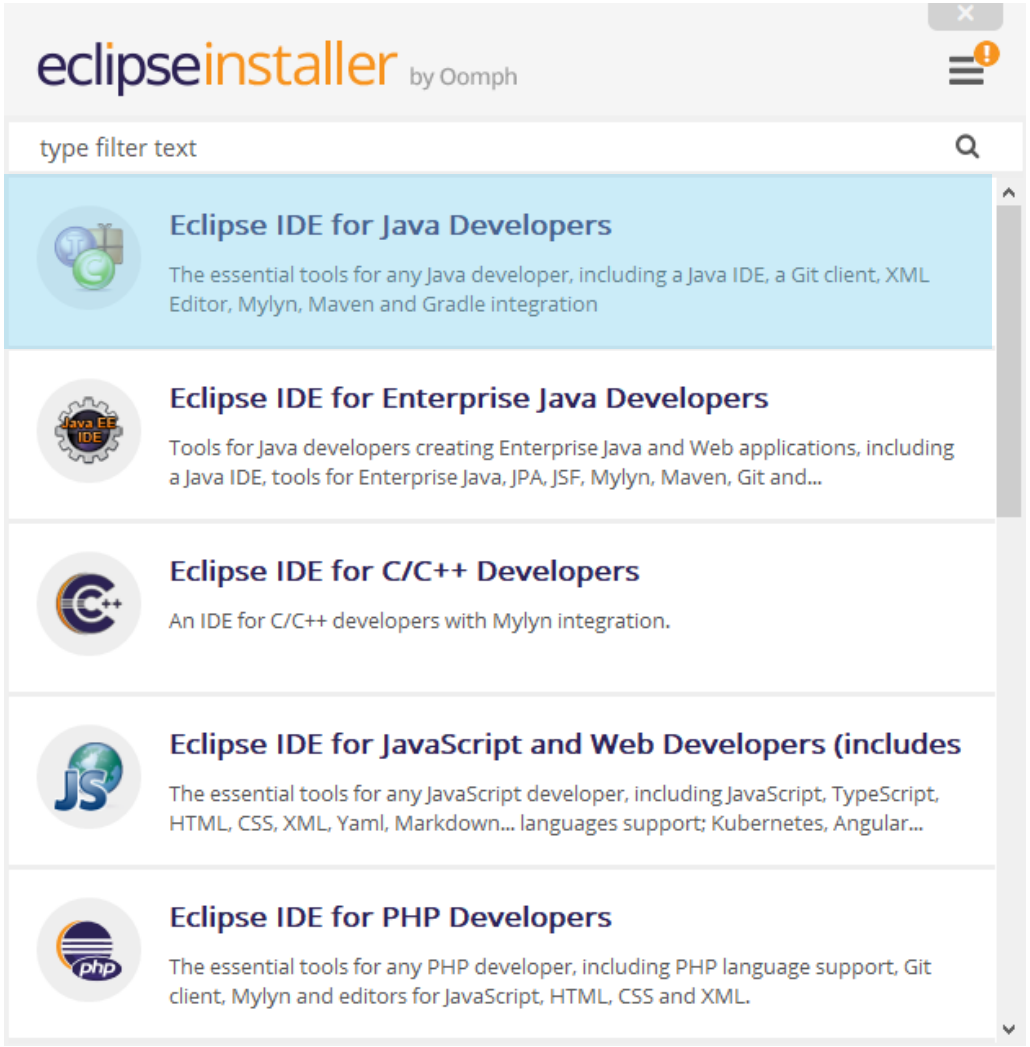

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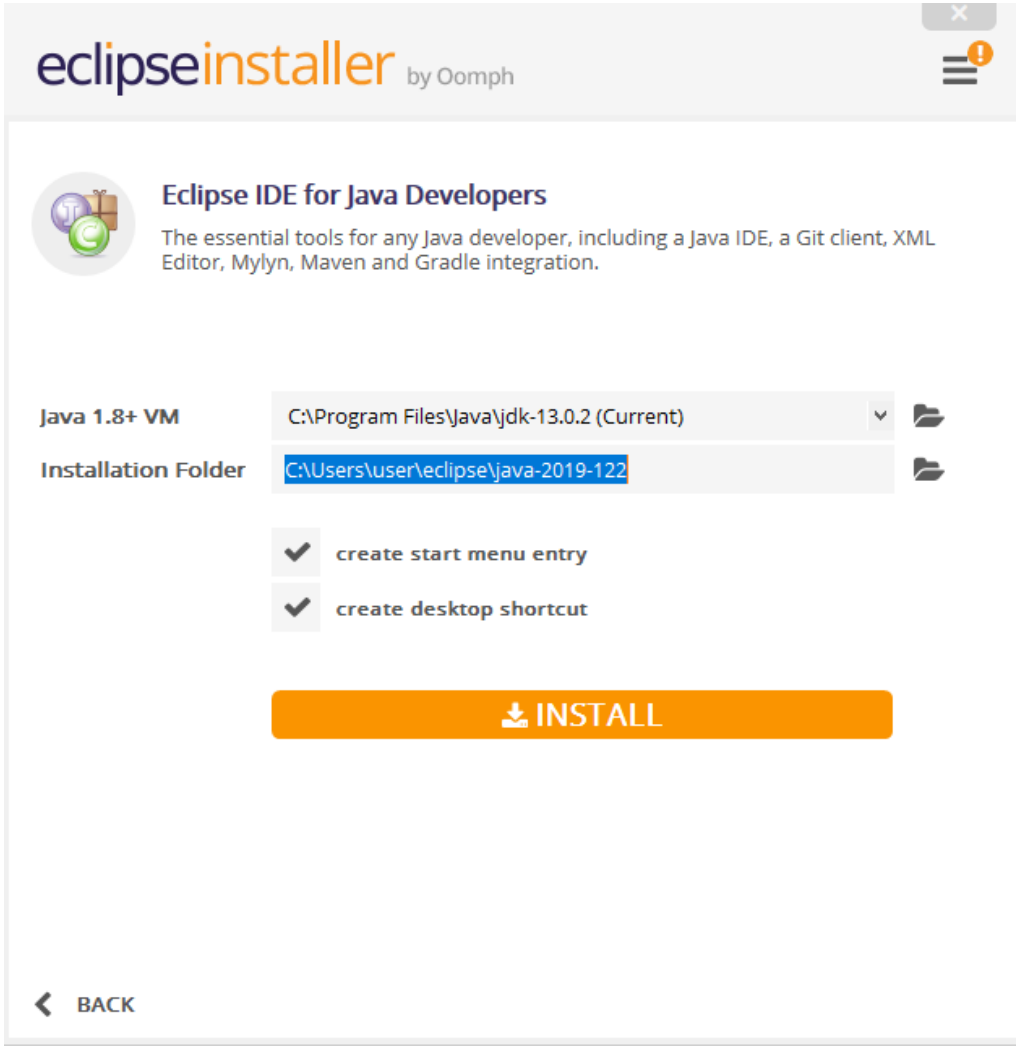
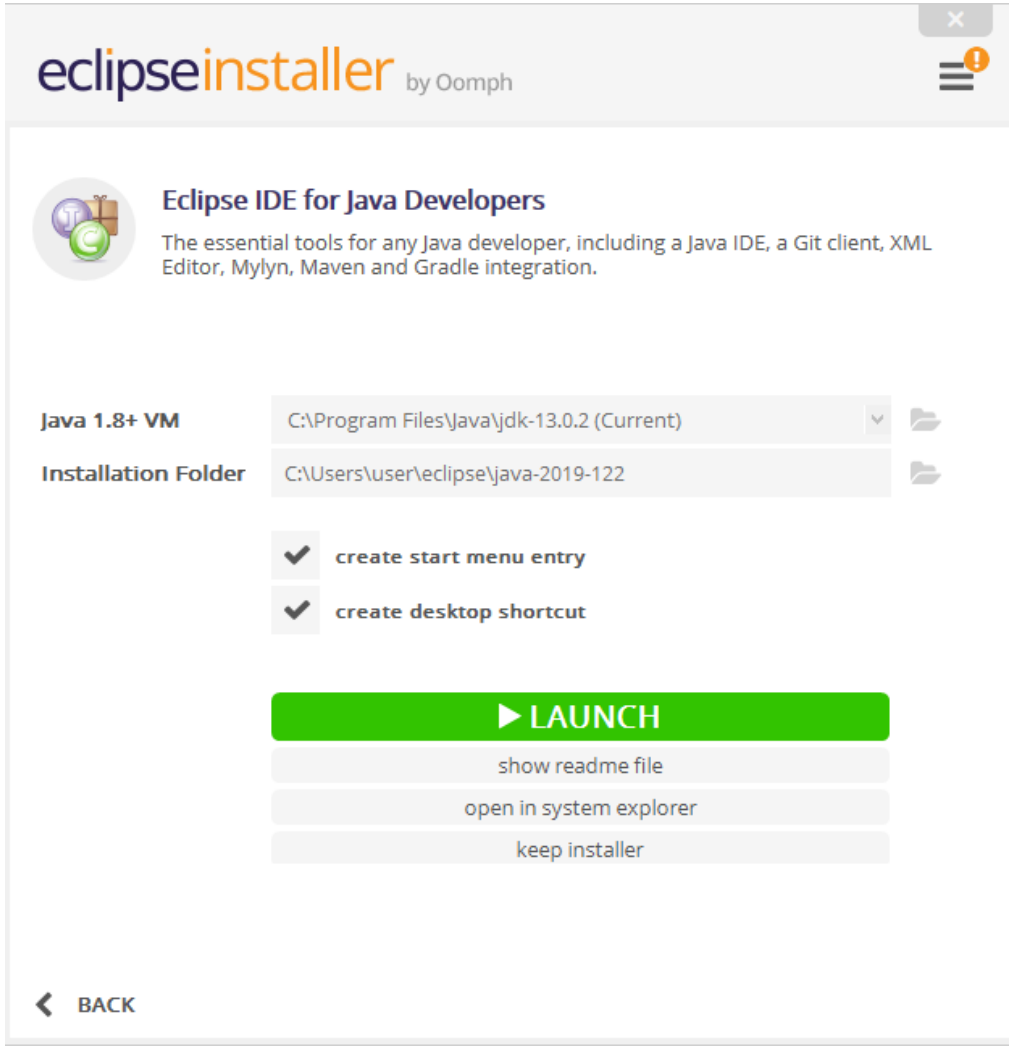
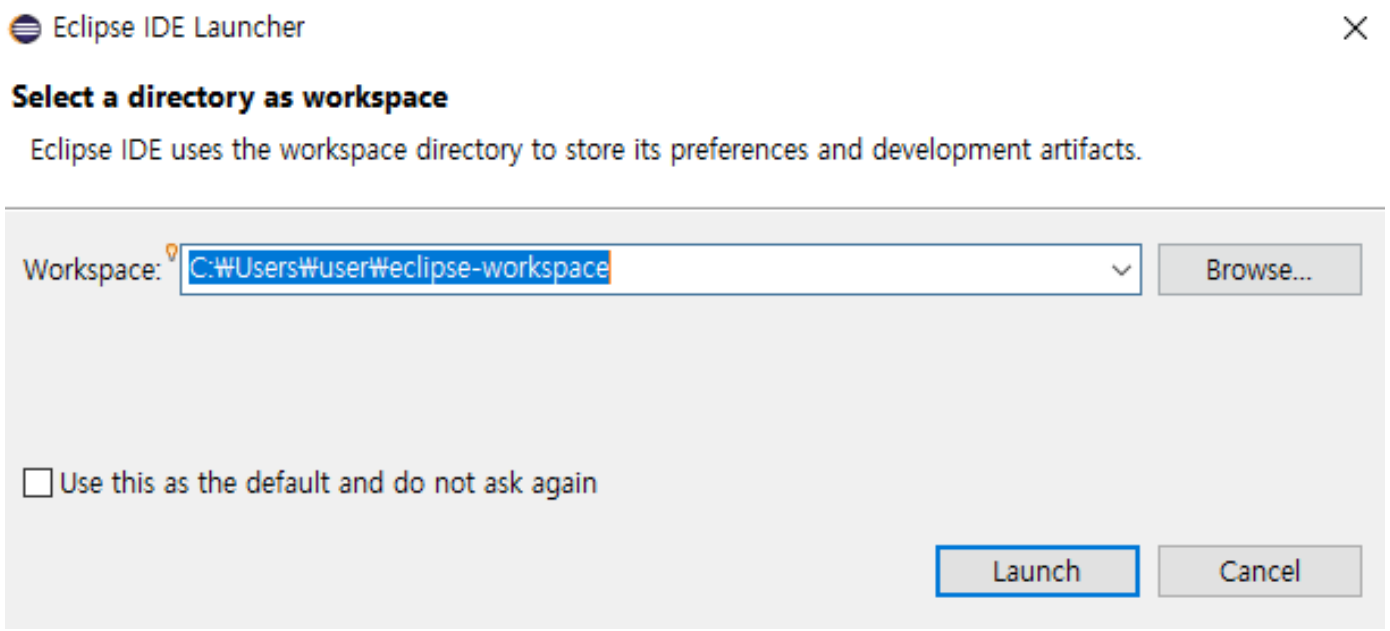


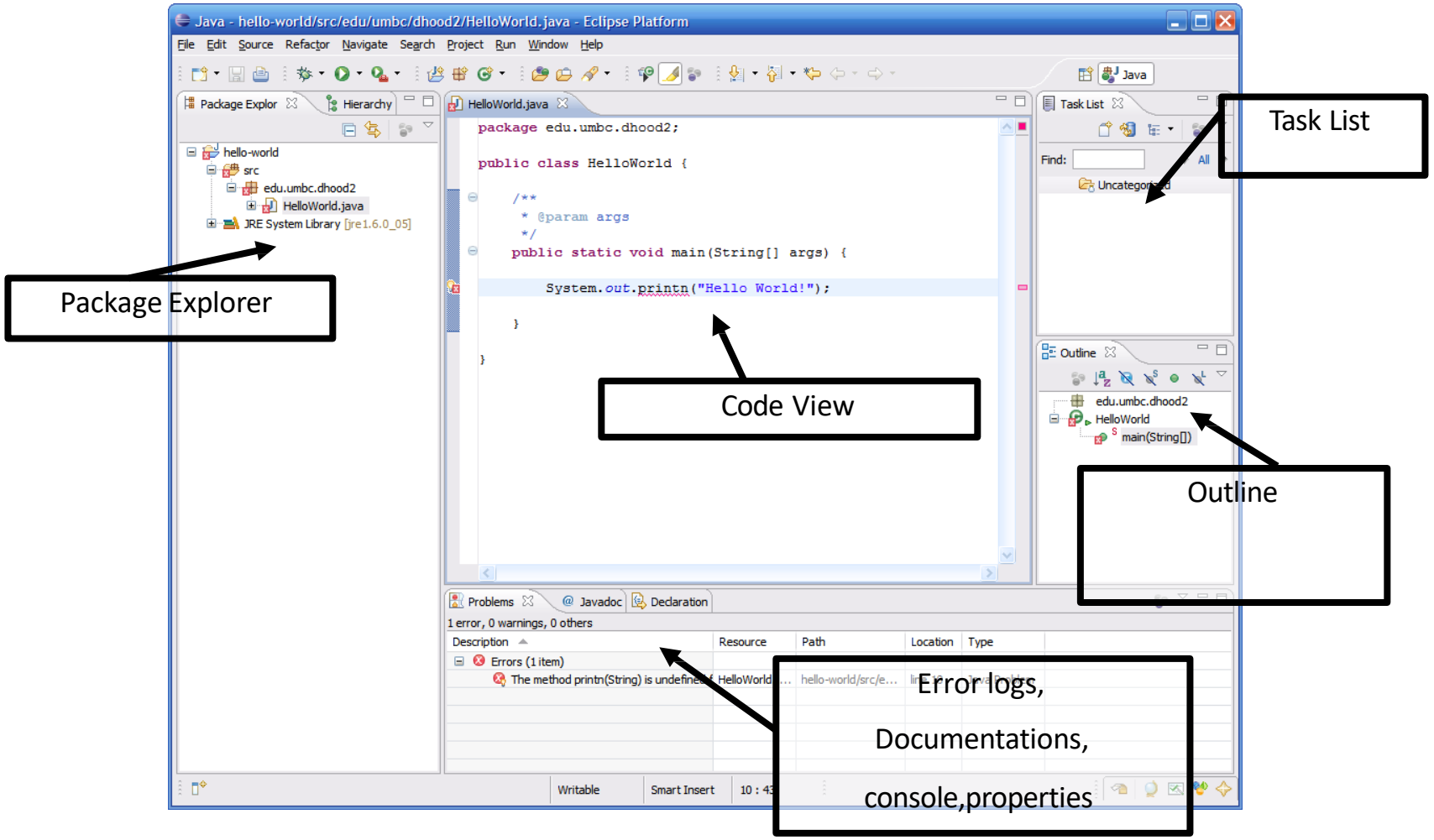
# Install Eclipse



# Install Eclipse

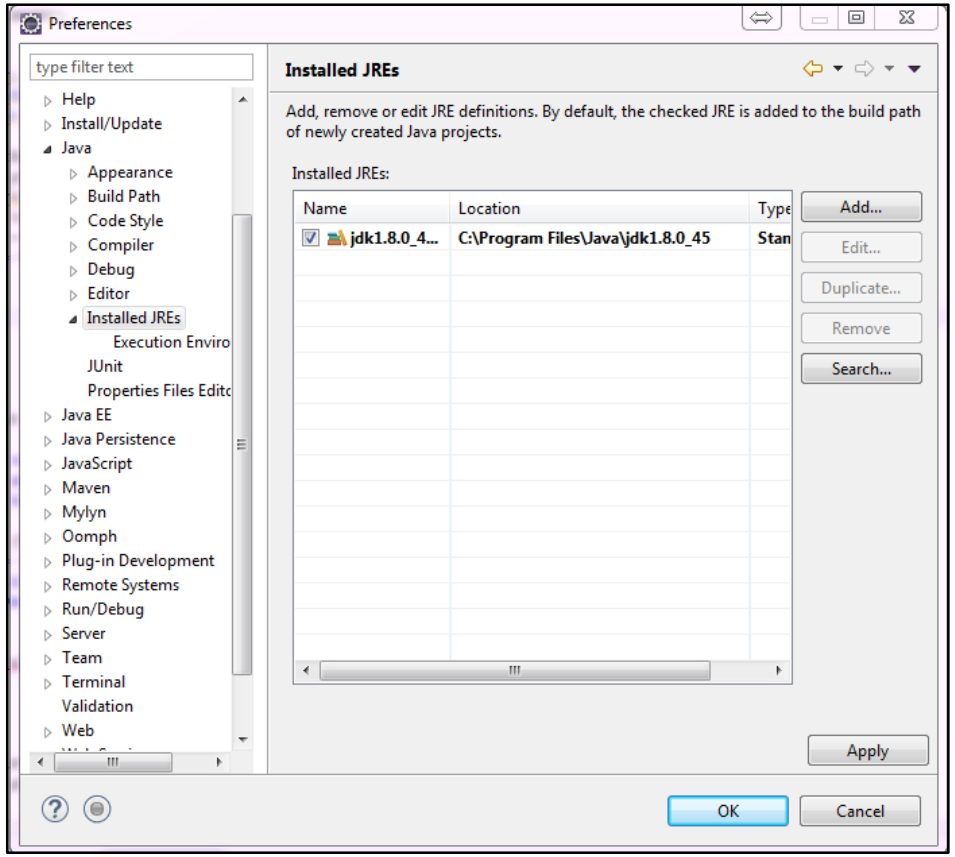


# Running Eclipse



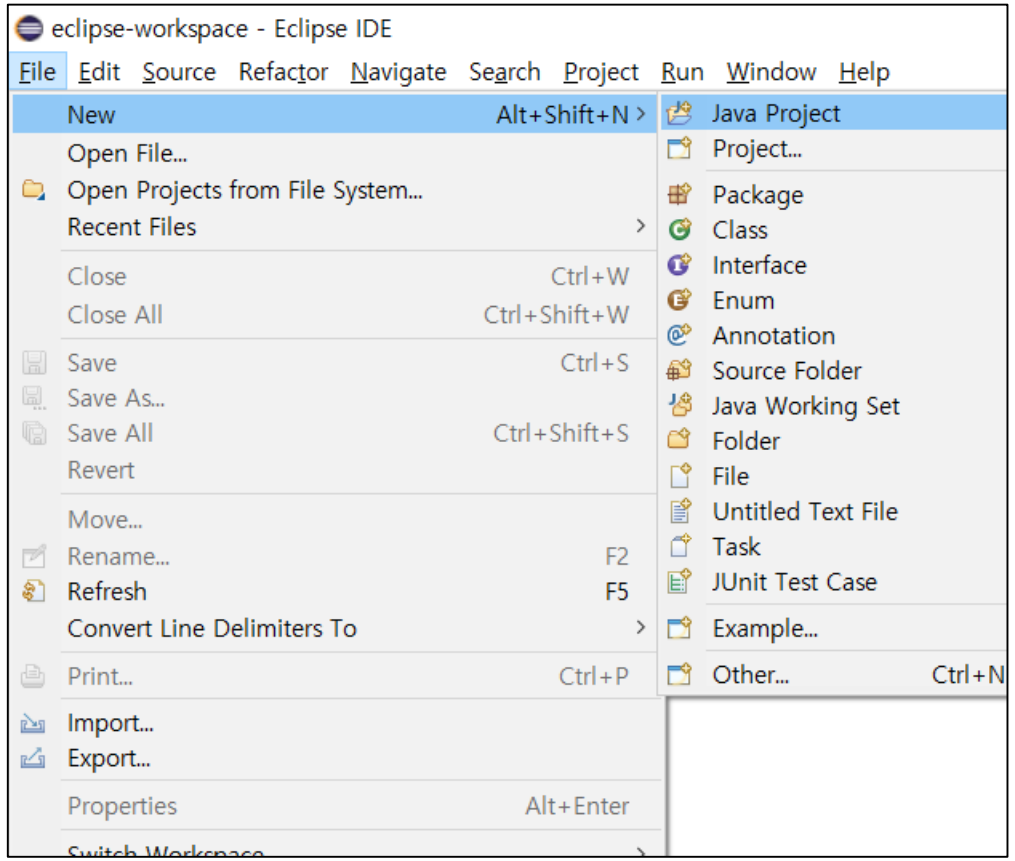
# Running Eclipse

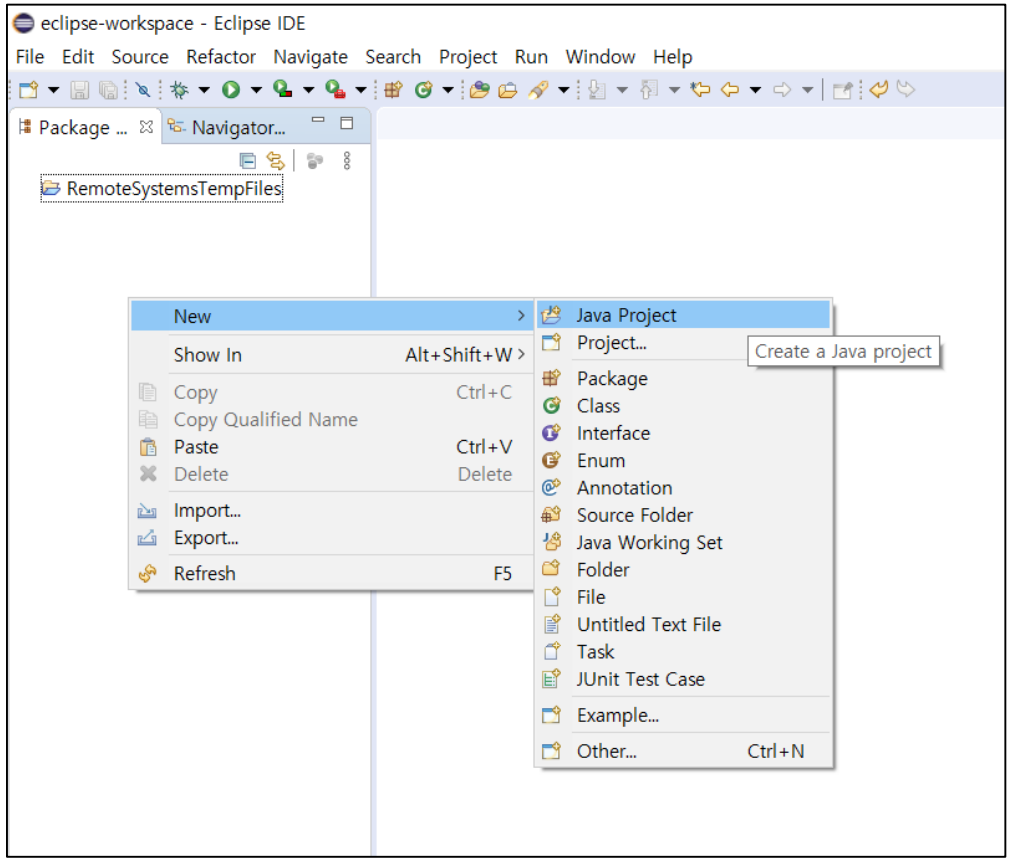
- Window → Preferences



# Running Eclipse

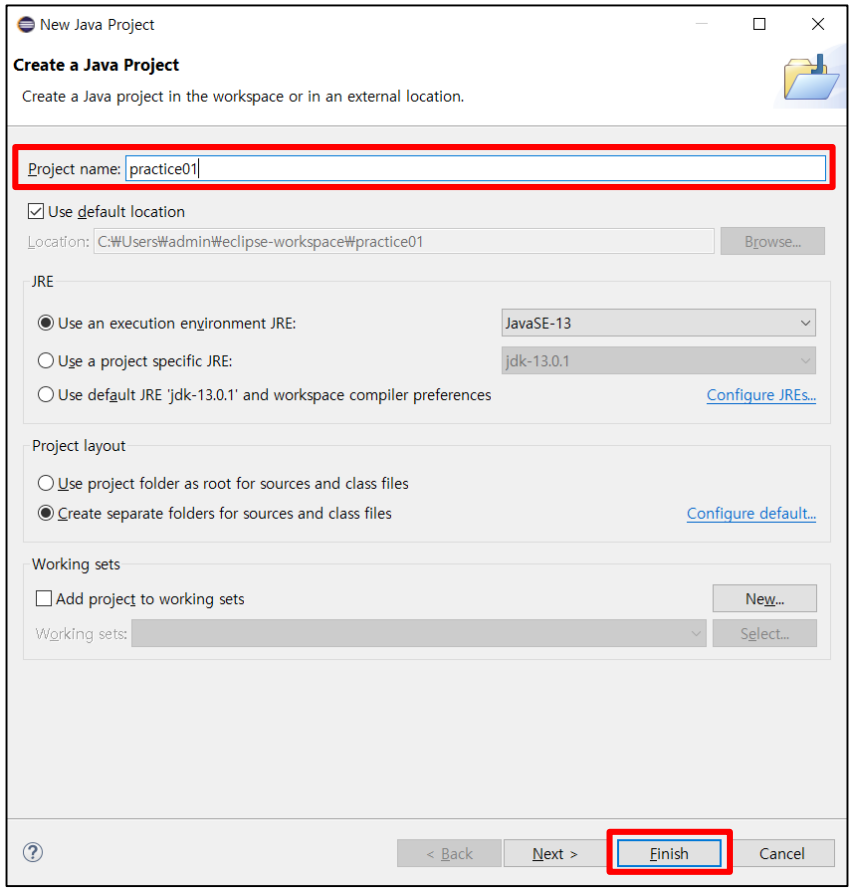
## - Create Project



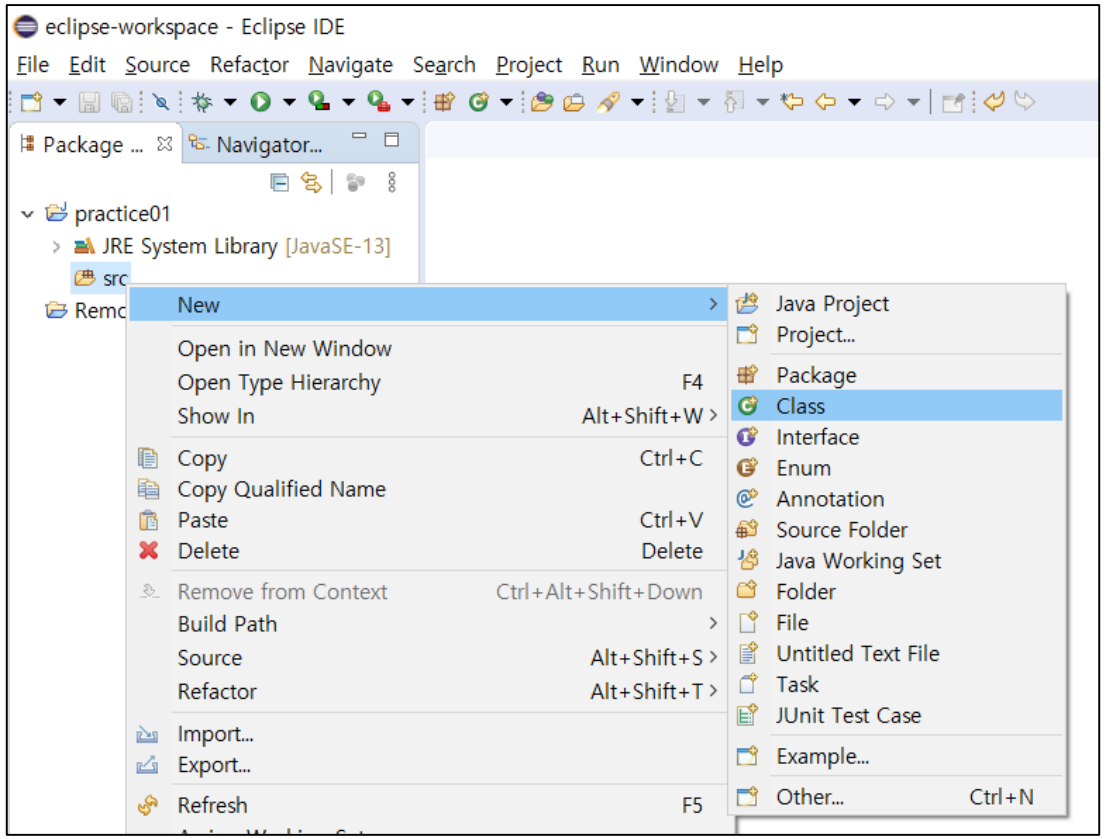
# Running Eclipse

- Create Project



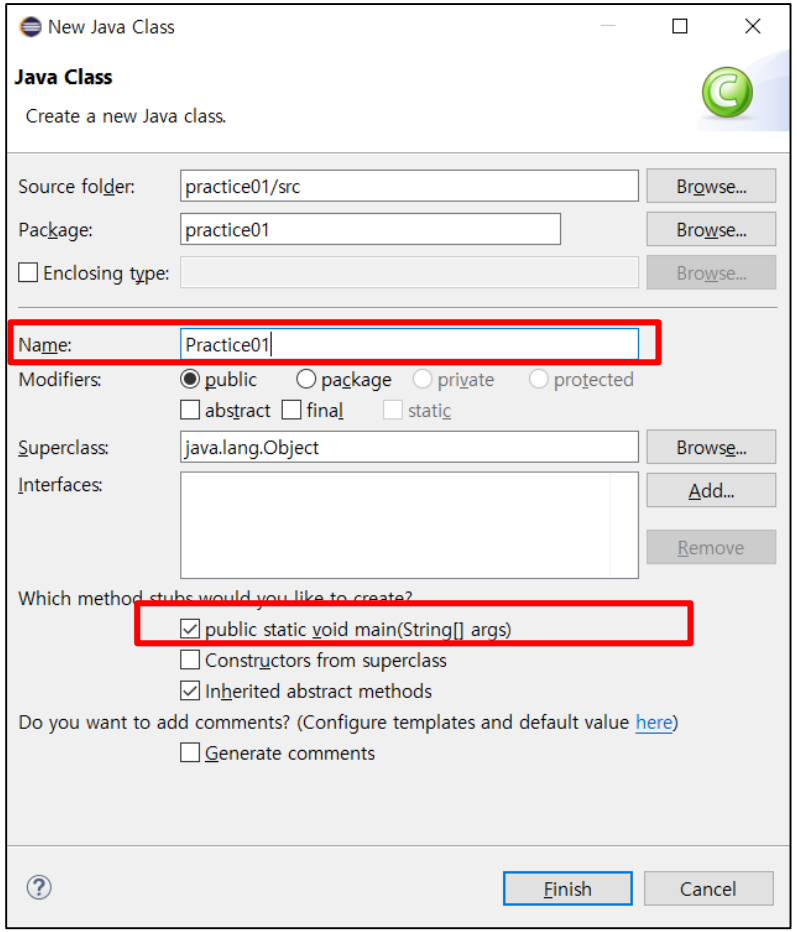
# Running Eclipse

- Create Project

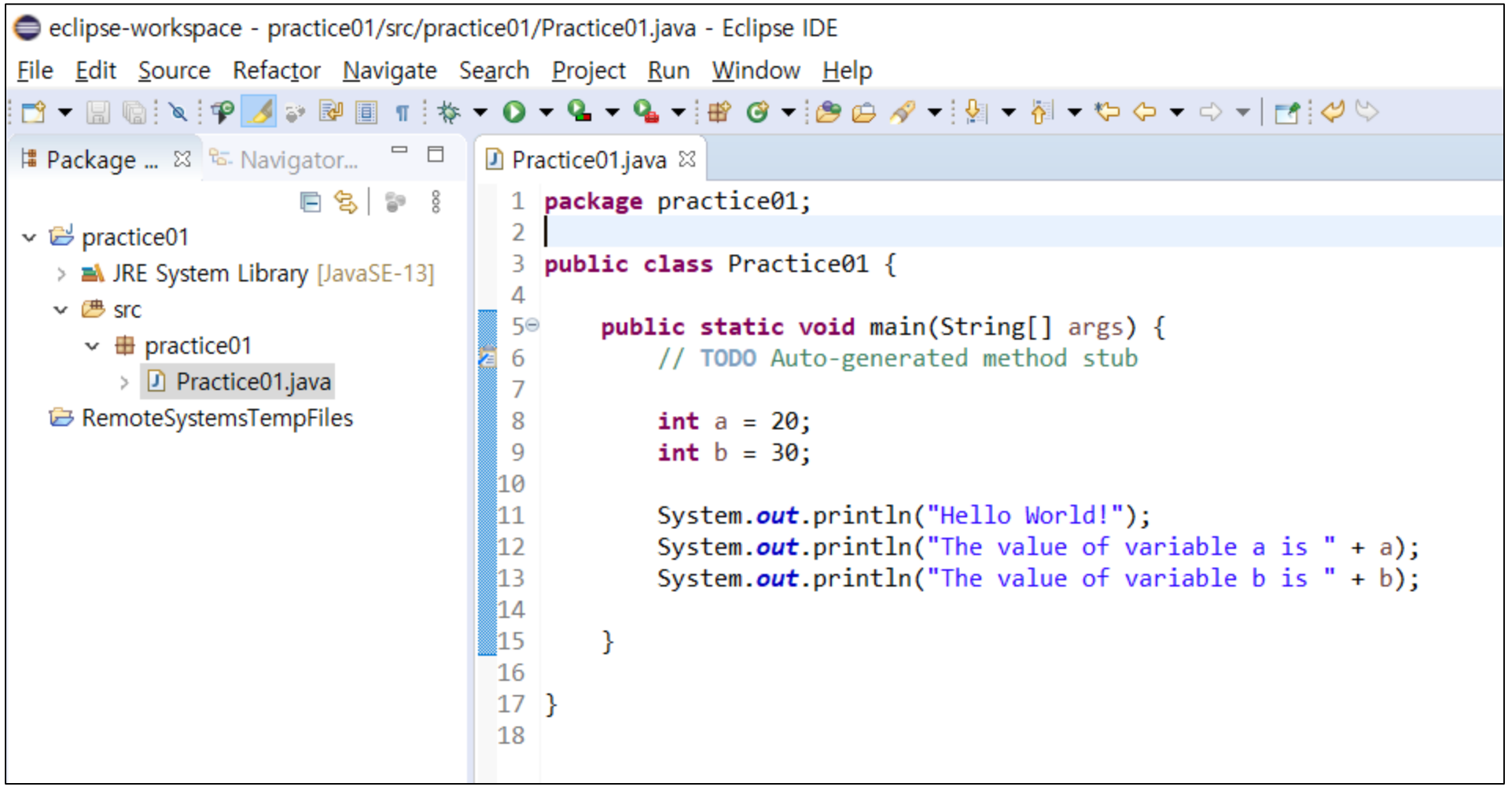


# Running Eclipse

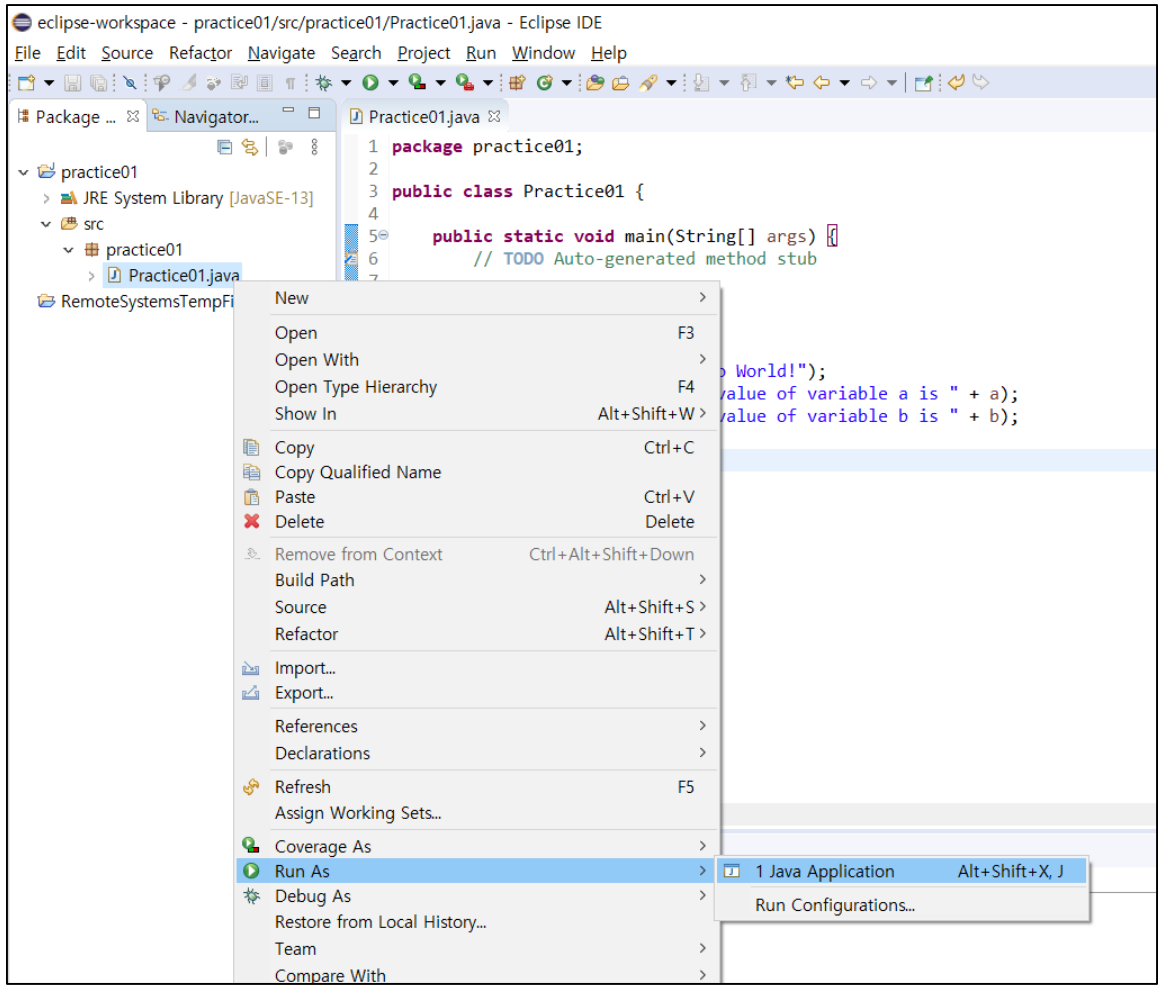
- Create Project



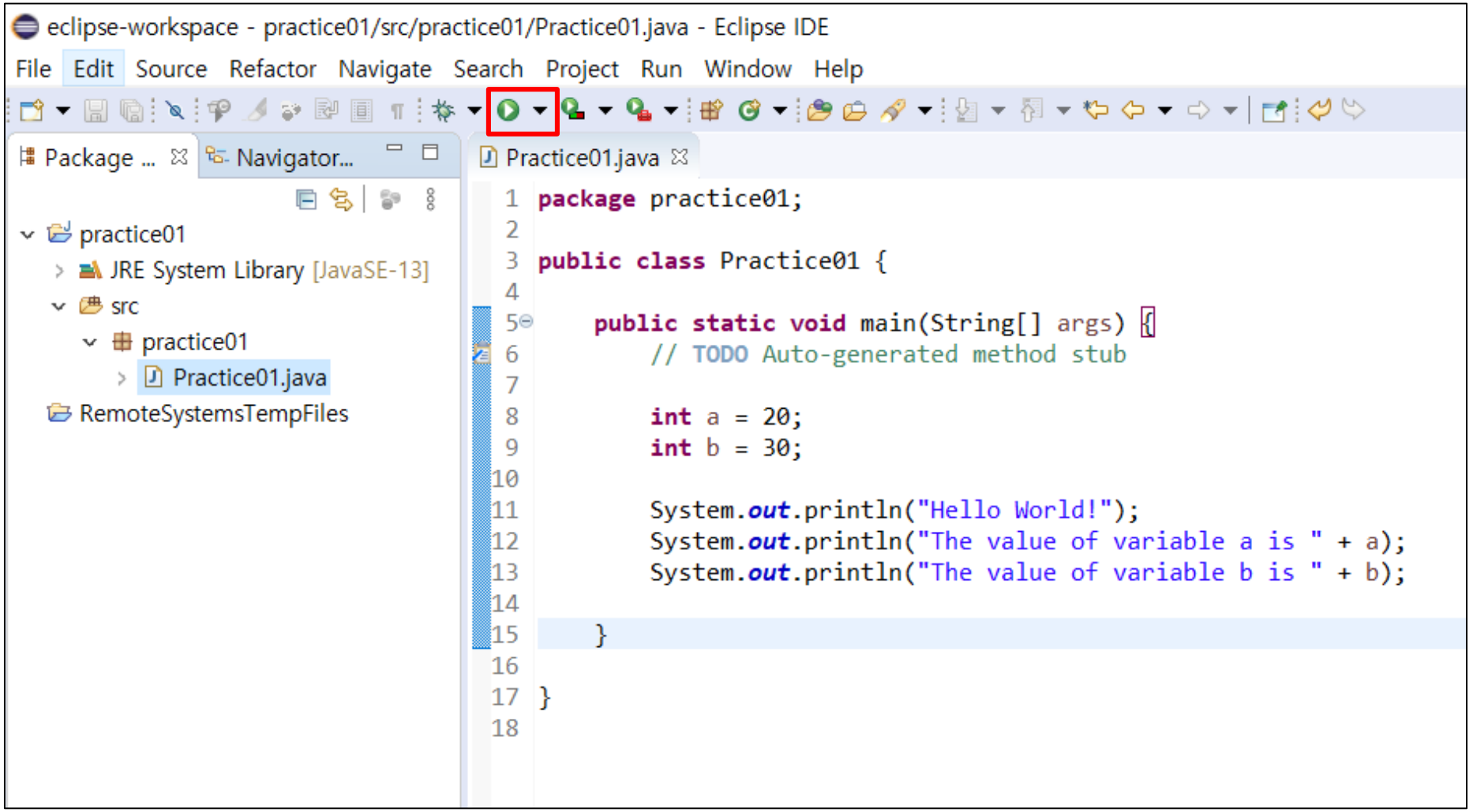
# Running Eclipse



# Running Eclipse



# Running Eclipse



# Running Eclipse

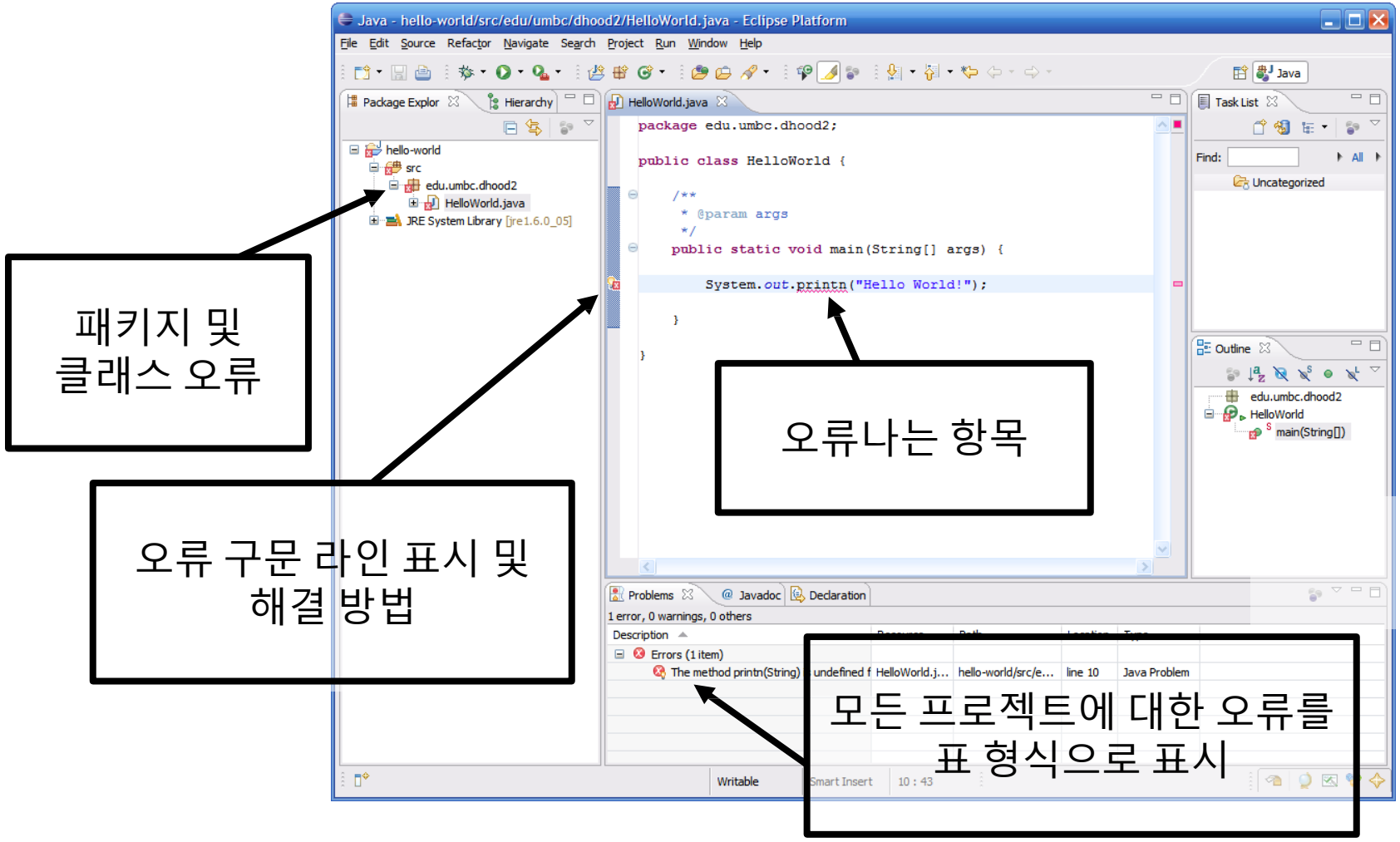
- Console Output(System.out.println)

```
int a = 20;
int b = 30;

System.out.println("Hello World!");
System.out.println("The value of variable a is " + a);
System.out.println("The value of variable b is " + b);
```

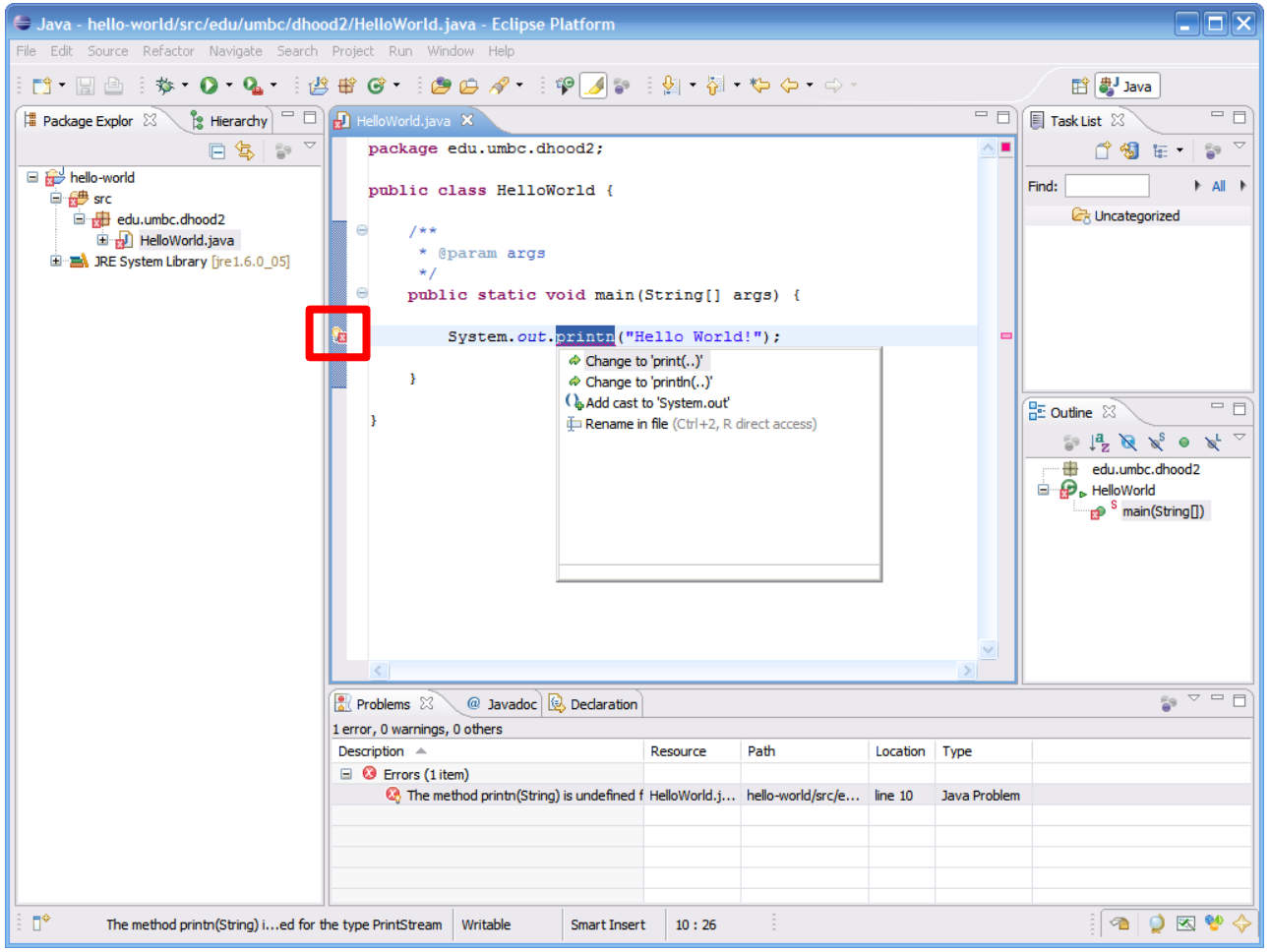
```
Hello World!
The value of variable a is 20
The value of variable b is 30
```

# Example Compilation Error



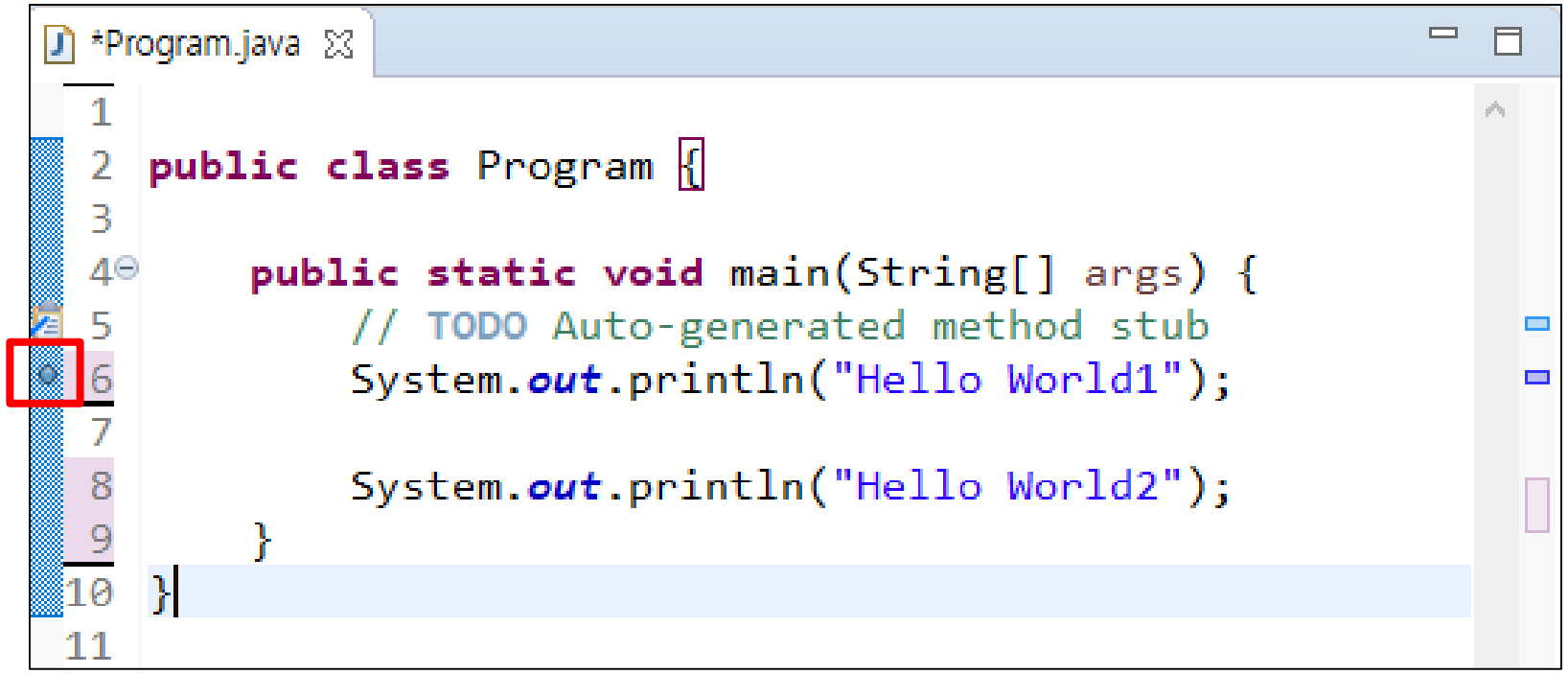
# Example Compilation Error

- 전구 버튼을 눌러 해결방법을 확인



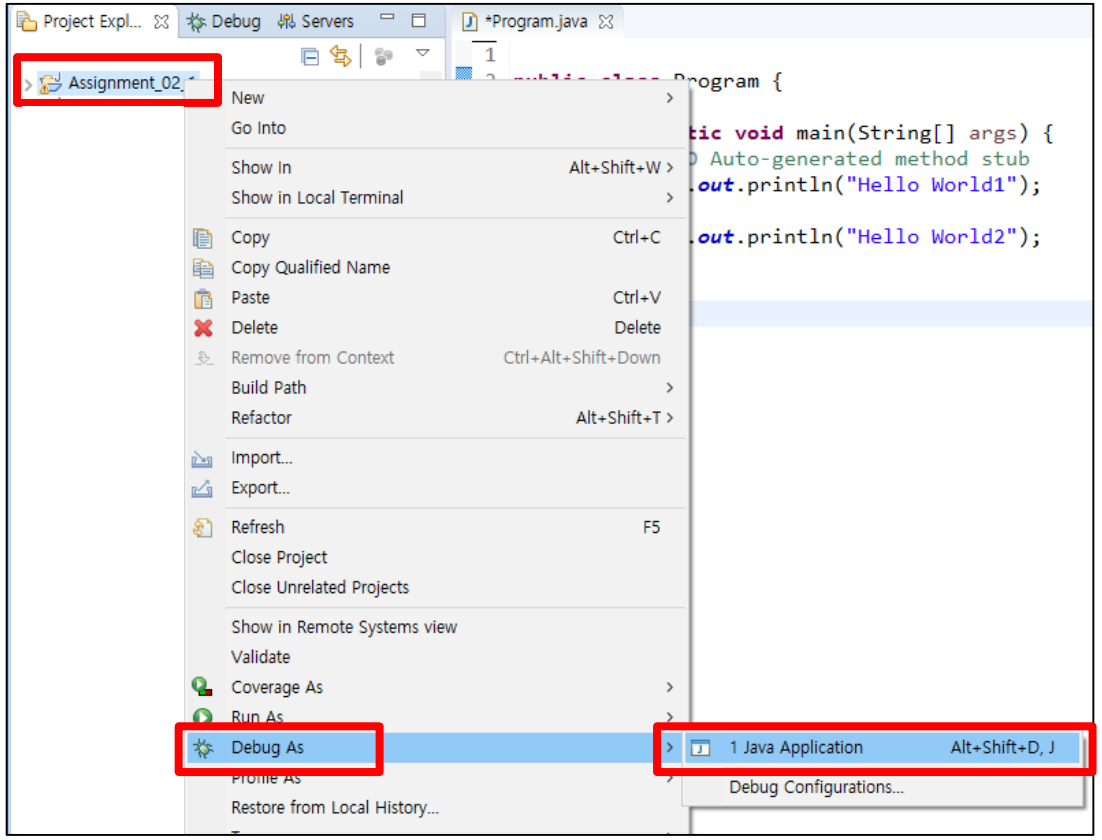
# Debugging Code

- 원하는 Line의 왼쪽을 더블 클릭하여 Break Point 생성

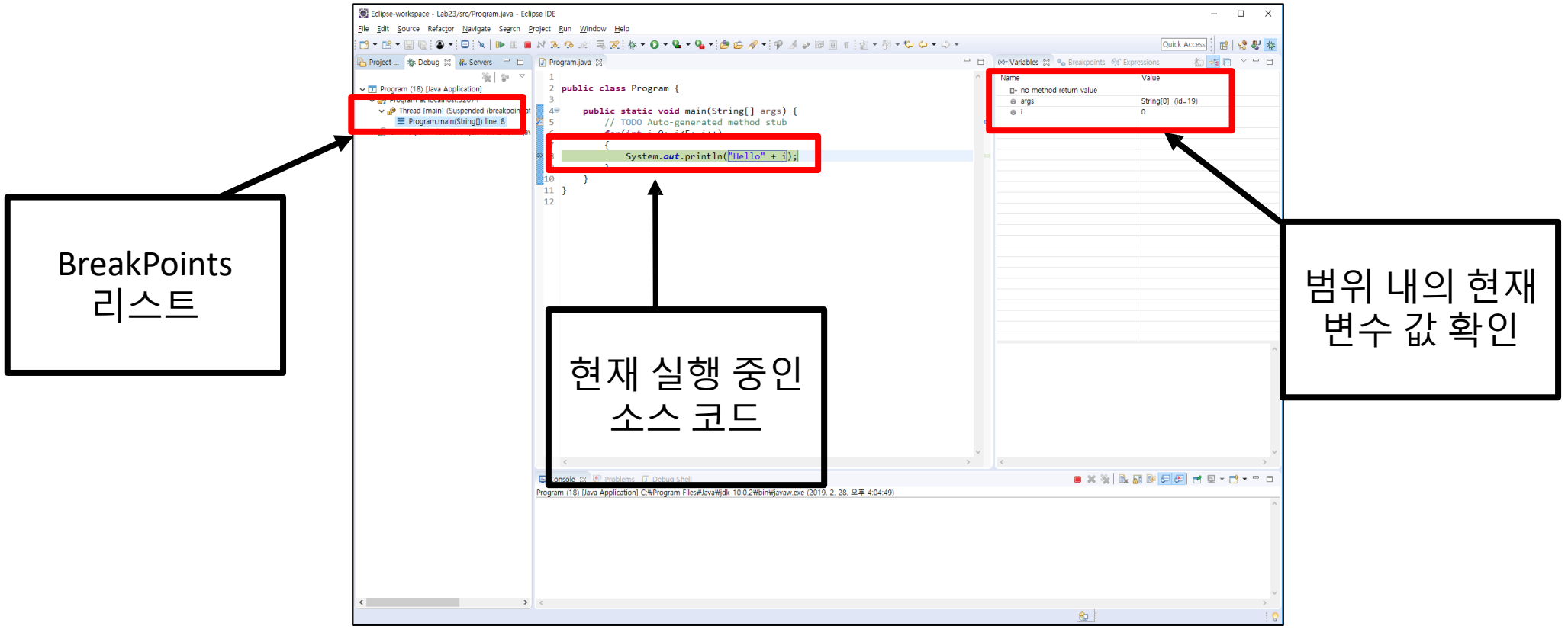


# Debugging Code

- 프로젝트 우클릭 – [Debug As] – [Java Application] 클릭



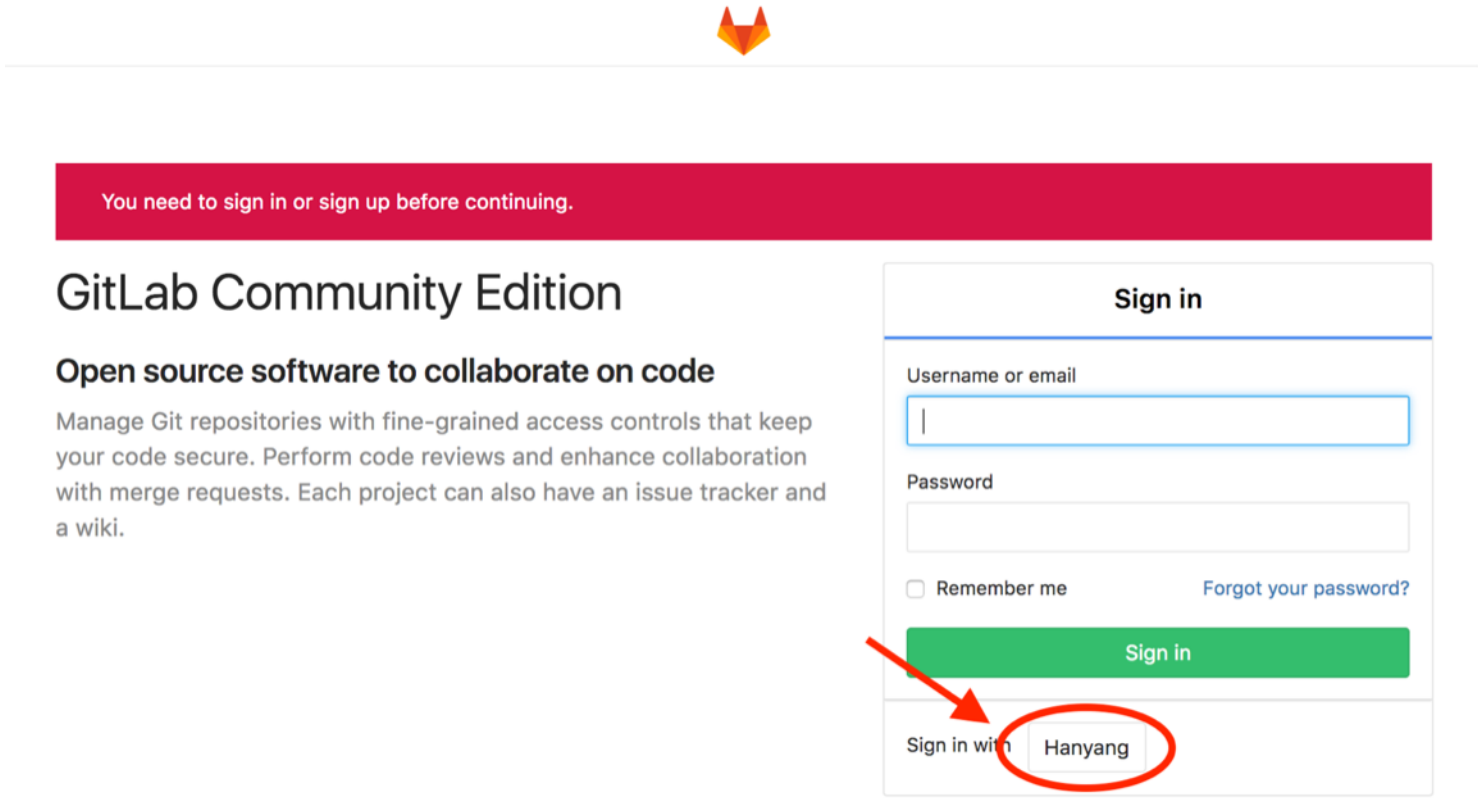
# Debugging Code



# GitLab

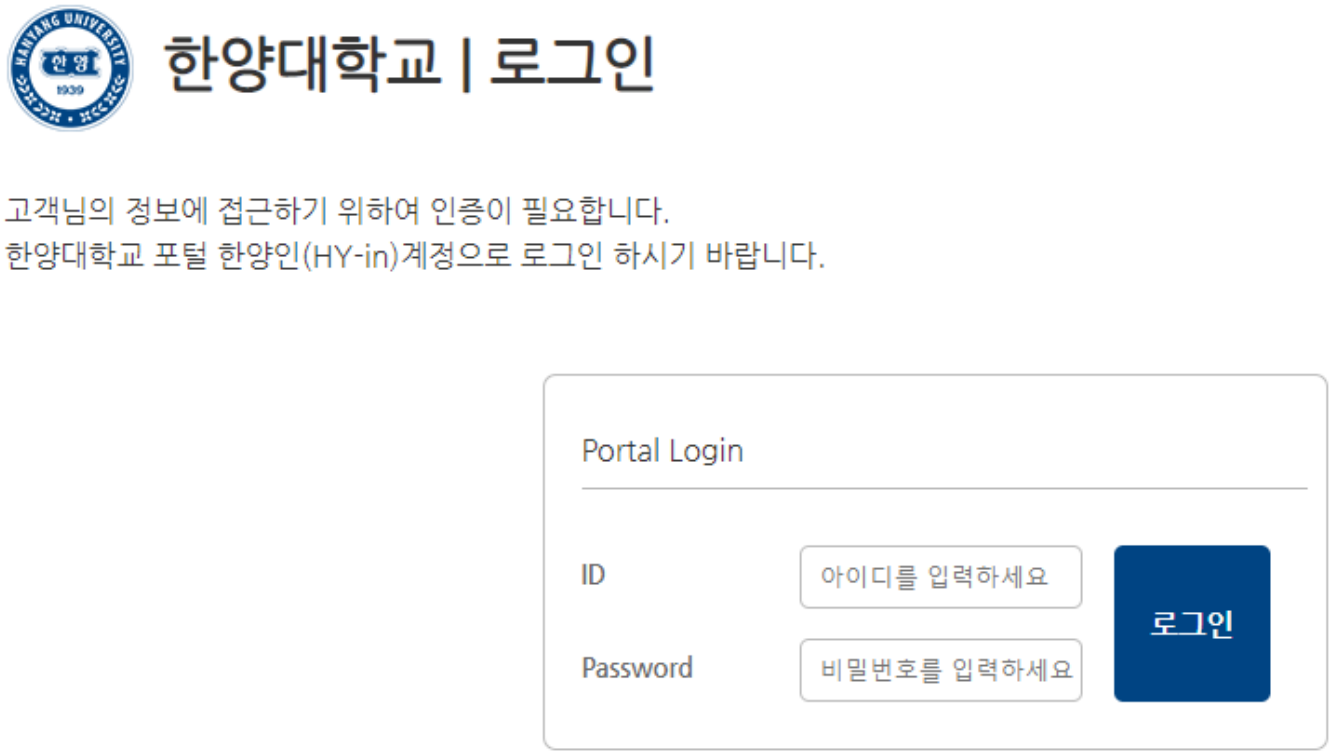
# GitLab 로그인 및 초기 설정

1. https://hconnect.hanyang.ac.kr 접속 후



# GitLab 로그인 및 초기 설정

## 2. 한양인 계정으로 로그인

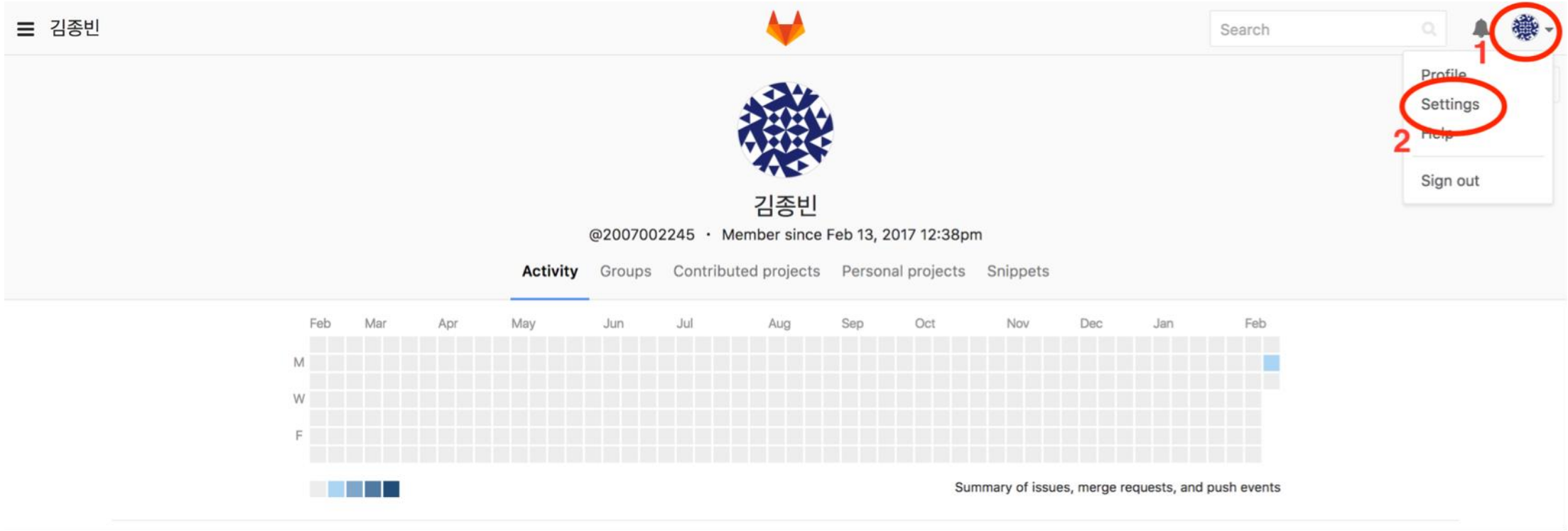


# GitLab 로그인 및 초기 설정

## 3. 정보 제공 동의

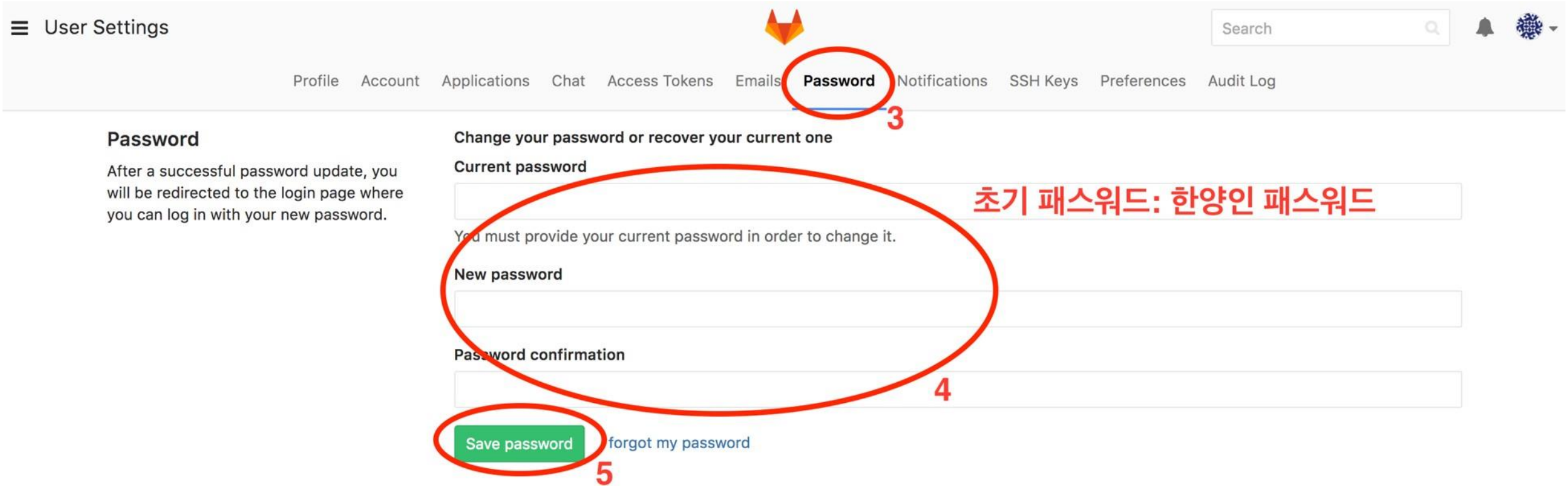
# GitLab 로그인 및 초기 설정

4. Password 설정



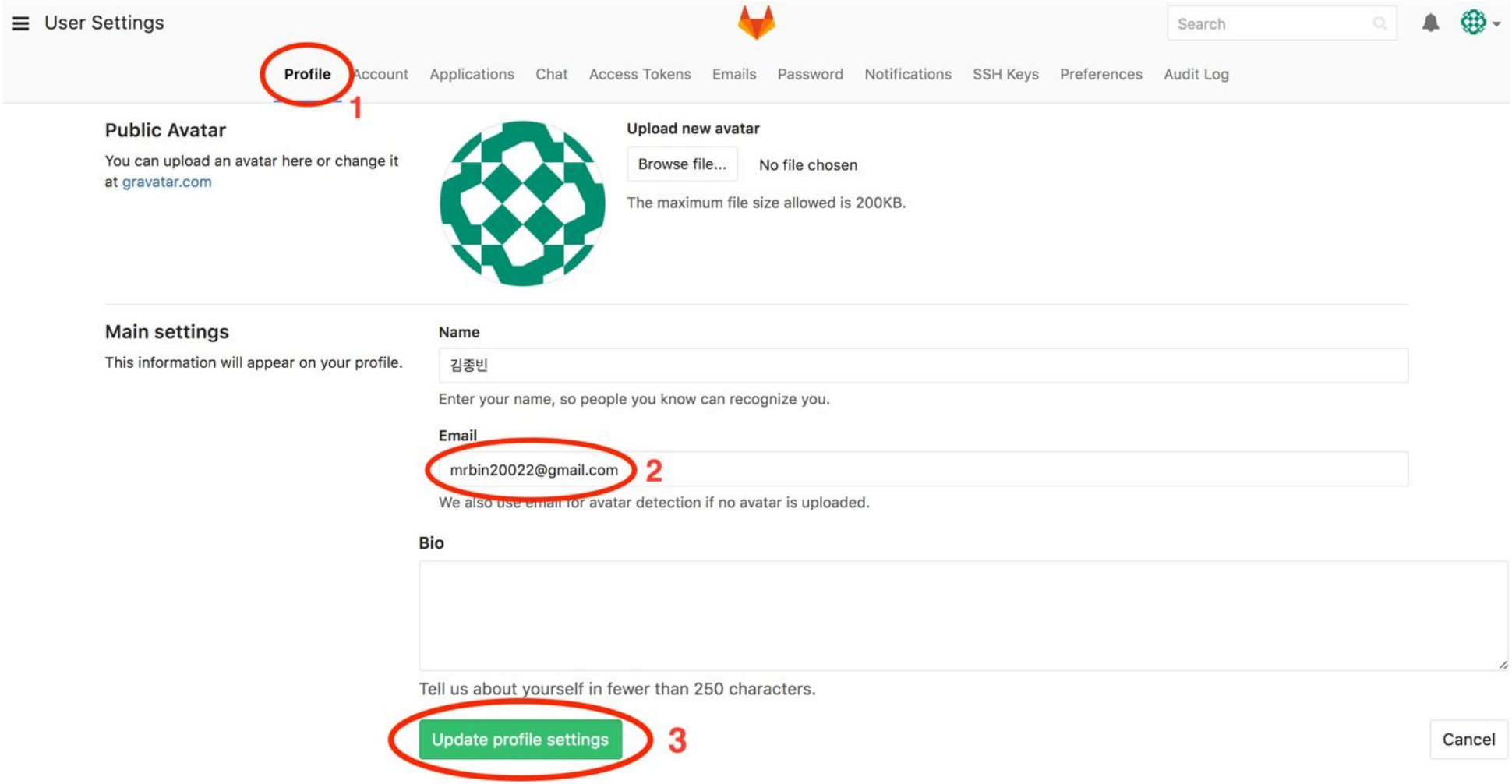
# GitLab 로그인 및 초기 설정

4. Password 설정



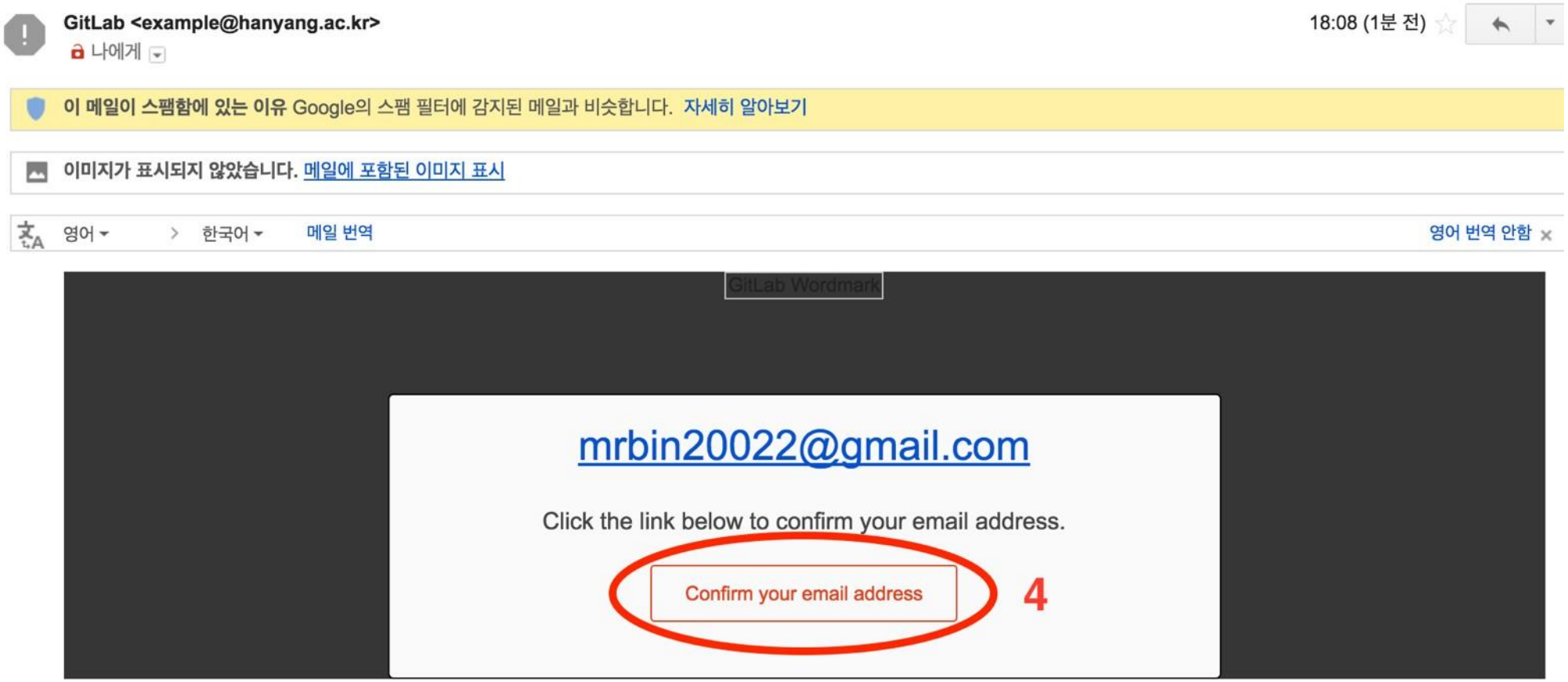
# GitLab 로그인 및 초기 설정

## 5. E-mail 설정



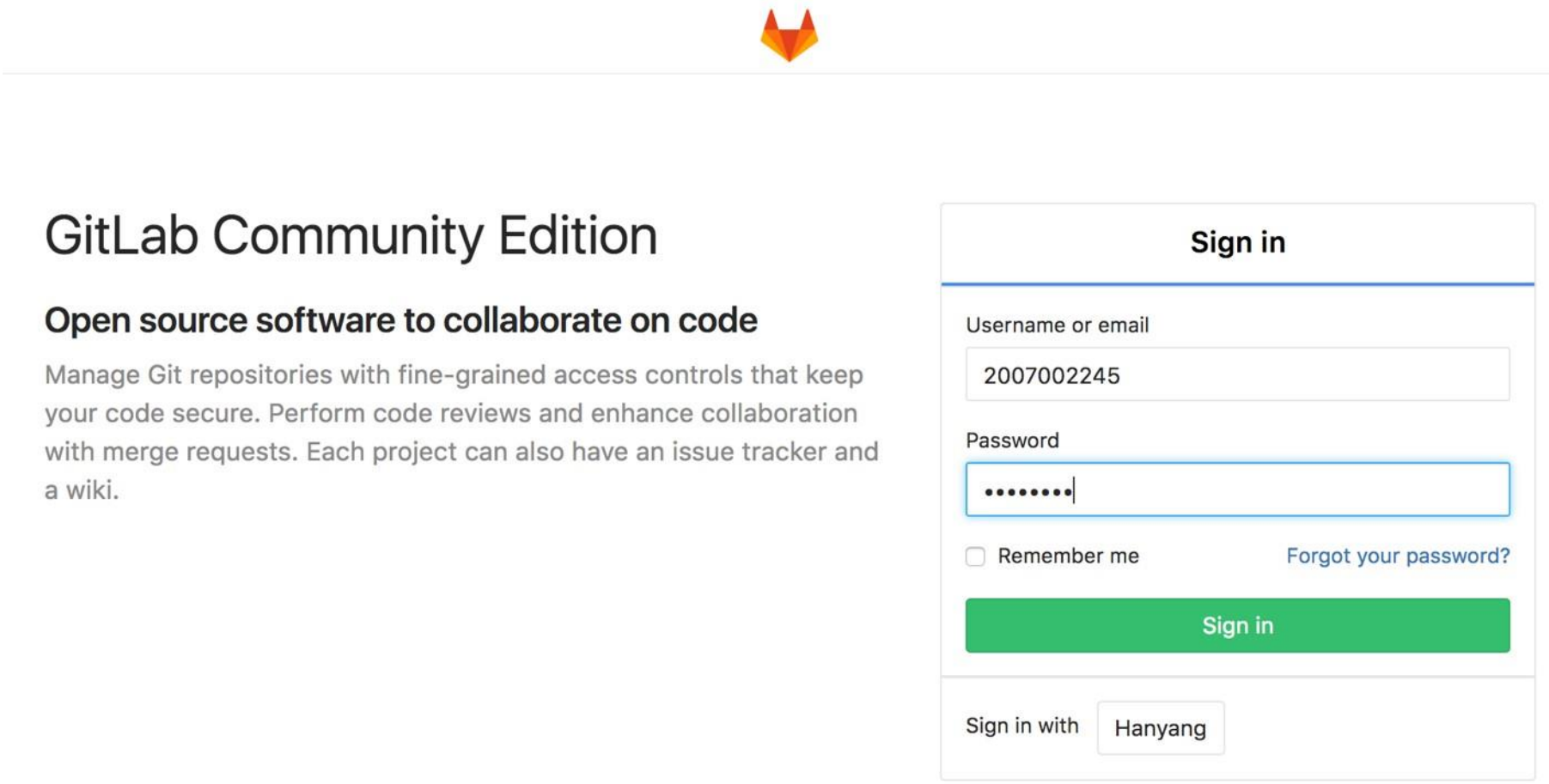
# GitLab 로그인 및 초기 설정

## 5. E-mail 설정 – 변경한 E-mail 로그인 후 승인



# GitLab 로그인 및 초기 설정

6. 이후, 로그인은 학번/email과 변경한 password로 가능



# 과제

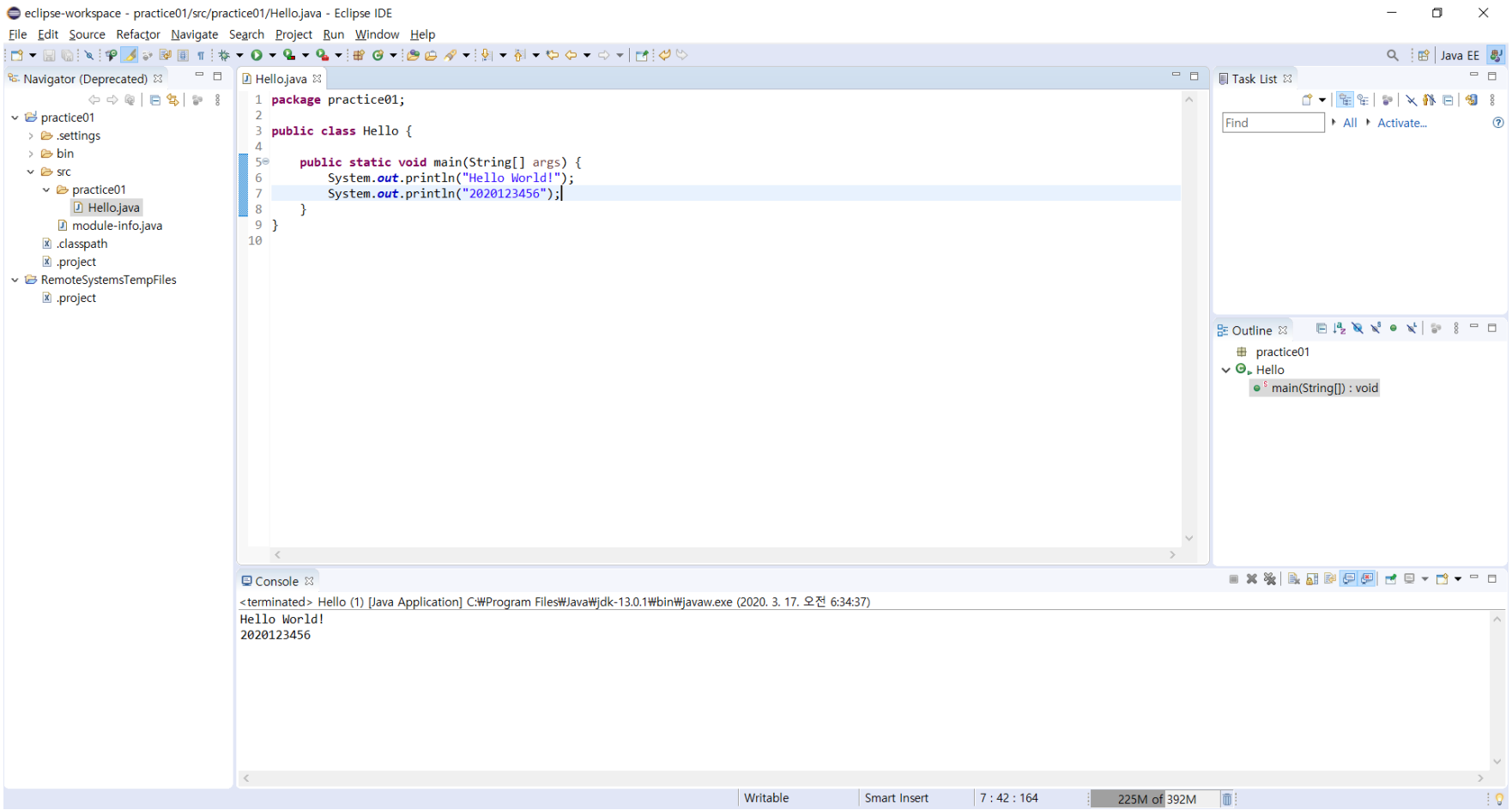
1) Eclipse 설치

- ‘practice01' project의 'Hello' class를 생성
- ‘Hello World!’와 본인의 학번을 출력하는 코드 작성
- 코드와 실행된 화면을 캡처 후 저장하여 제출

2) GitLab 가입

# 과제

## < 과제 예시 >


eclipse-workspace - practice01/src/practice01/Hello.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Navigator (Deprecated)
practice01
.settings
bin
src
practice01
Hello.java
module-info.java
.classpath
.project
RemoteSystemsTempFiles
.project
Hello.java
1 package practice01;
2
3 public class Hello {
4
5 public static void main(String[] args) {
6 System.out.println("Hello World!");
7 System.out.println("2020123456");
8 }
9 }
10
Task List
Find
All
Activate...
Outline
practice01
Hello
main(String[]) : void
Console
<terminated> Hello (1) [Java Application] C:₩Program Files₩Java₩jdk-13.0.1₩bin₩javaw.exe (2020. 3. 17. 오전 6:34:37)
Hello World!
2020123456
Writable
Smart Insert
7 : 42 : 164
225M of 392M

# Q & A