



HW1

林苡晴110356019@nccu.edu.tw

蔣其勳111356024@nccu.edu.tw



Lab class notice

- This semester, the lab class will start at 12:10 p.m. on Monday, and the class will start on time and won't wait for those who are late.
- Won't roll call on lab class.

Rules of Homework

- Project Name: **HW{number of homework_ID number}** , ex: HW1_110306XXX
- The class name where the **main function** of the code is located must be **Main**
- Remind uppercase and lowercase
- When the code is compressed and uploaded, please compress the project folder (ex: HW1_110306XXX) into .zip
- Unless otherwise specified by TA, homework that cannot be compiled and executed won't be accepted.

Rules of Homework

- Before the Lab class, we will upload sample code and slides on GitHub. Please follow the sample code we gave you to complete your homework.
- We will open the WM5 hand-in section before Lab class; the deadline usually is the midnight of the next TA class. The date will different from the date on the teacher's slide.
- If you miss the deadline, your late homework can be made up before the end of the semester in the make-up section of WM5. But can only get 4 out of 5 for late homework.

(This make-up section will open near the end of the semester.)

Rules of Homework

- Reject the homework of plagiarism and tampering
- First time: Zero point for that homework.
- Second time: Zero point for the entire semester's homework.
- The list of plagiarism and tampering will be announced at the end of the semester.

Download Homework

- First time

In your computer's folder (where you want to store it), use the command below :

```
cd (your folder path)
```

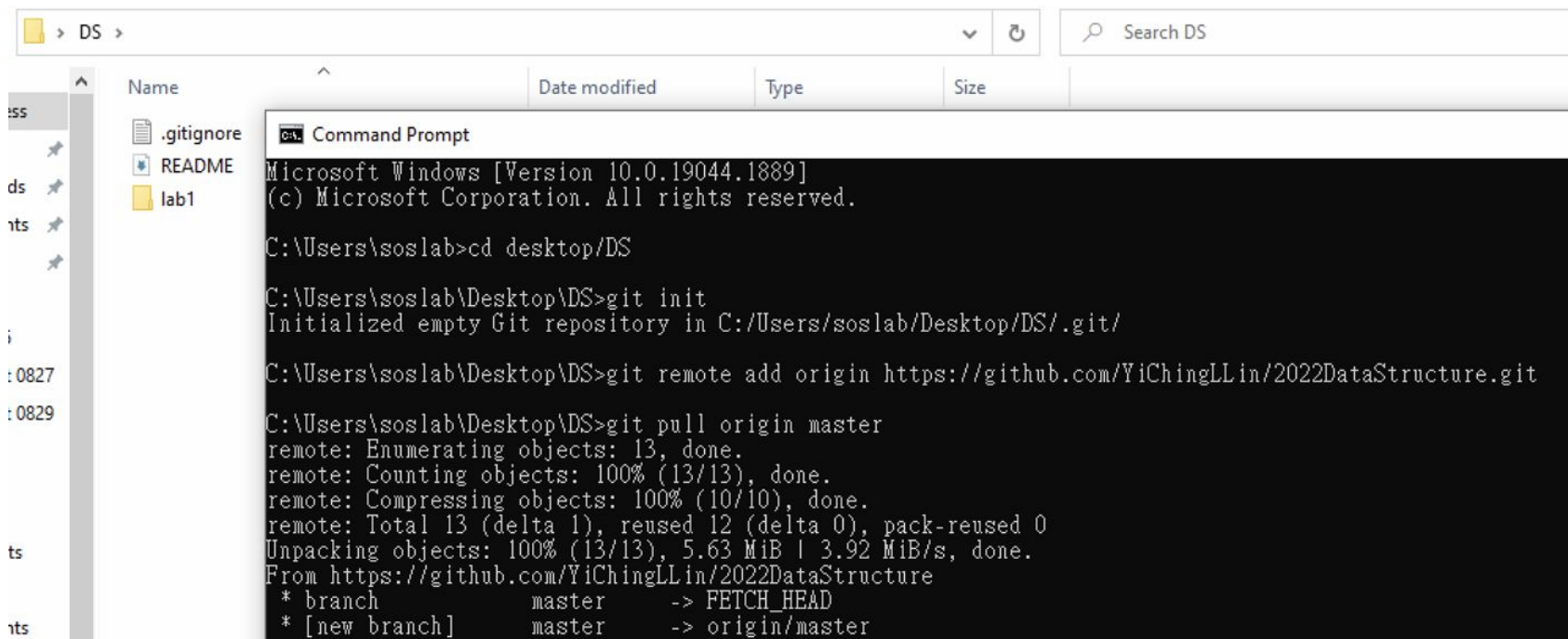
```
git init
```

```
git remote add origin https://github.com/YiChingLLin/2022DataStructure.git
```

```
git pull origin master
```

Download Homework

- First time



The screenshot shows a Windows File Explorer window with the path 'DS' selected. The file list includes '.gitignore', 'README', and a folder named 'lab1'. Overlaid on this is a Command Prompt window with the following text:

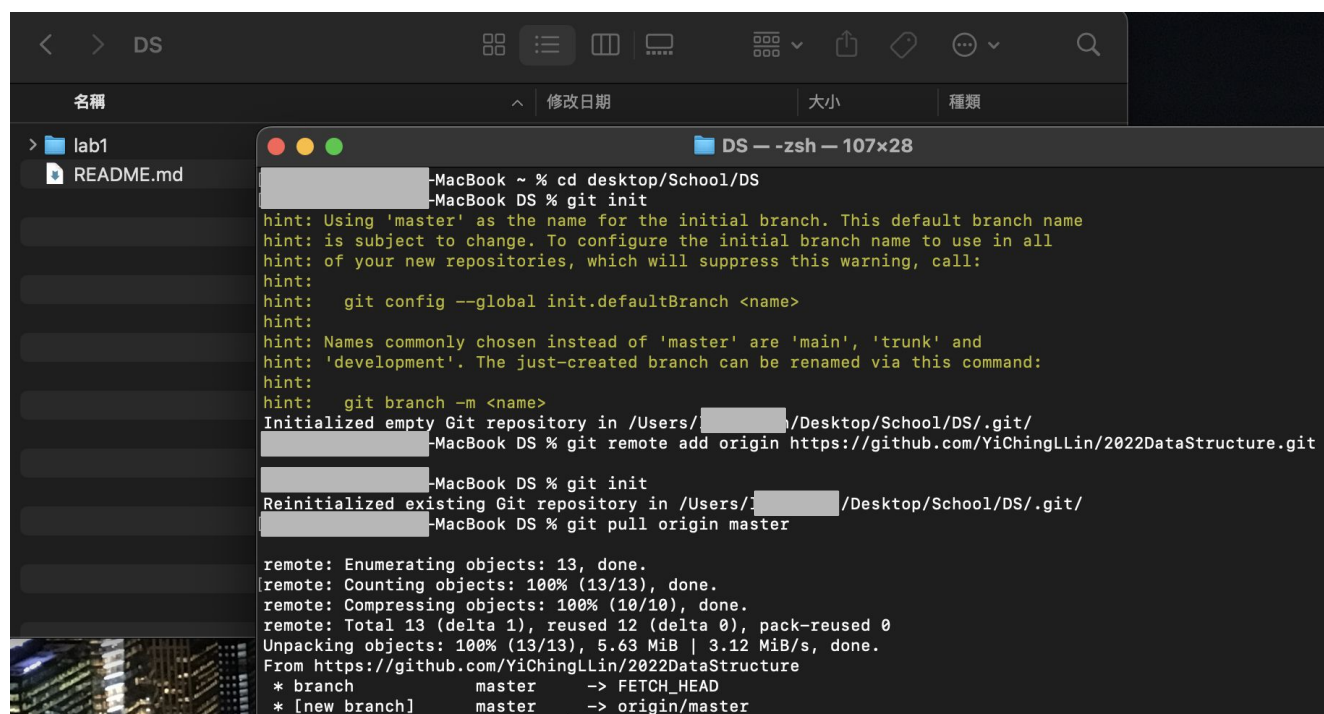
```
Microsoft Windows [Version 10.0.19044.1889]
(c) Microsoft Corporation. All rights reserved.

C:\Users\soslab>cd desktop/DS

C:\Users\soslab\Desktop\DS>git init
Initialized empty Git repository in C:/Users/soslab/Desktop/DS/.git/

C:\Users\soslab\Desktop\DS>git remote add origin https://github.com/YiChingLLin/2022DataStructure.git

C:\Users\soslab\Desktop\DS>git pull origin master
remote: Enumerating objects: 13, done.
remote: Counting objects: 100% (13/13), done.
remote: Compressing objects: 100% (10/10), done.
remote: Total 13 (delta 1), reused 12 (delta 0), pack-reused 0
Unpacking objects: 100% (13/13), 5.63 MiB | 3.92 MiB/s, done.
From https://github.com/YiChingLLin/2022DataStructure
* branch          master      -> FETCH_HEAD
* [new branch]     master      -> origin/master
```



The screenshot shows a macOS Finder window with the path 'DS' selected. The file list includes a folder named 'lab1' and a file named 'README.md'. Overlaid on this is a terminal window with the following text:

```
MacBook ~ % cd desktop/School/DS
MacBook DS % git init
hint: Using 'master' as the name for the initial branch. This default branch name
hint: is subject to change. To configure the initial branch name to use in all
hint: of your new repositories, which will suppress this warning, call:
hint:
hint:   git config --global init.defaultBranch <name>
hint:
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint:   git branch -m <name>
Initialized empty Git repository in /Users/[redacted]/Desktop/School/DS/.git/
MacBook DS % git remote add origin https://github.com/YiChingLLin/2022DataStructure.git

MacBook DS % git init
Reinitialized existing Git repository in /Users/[redacted]/Desktop/School/DS/.git/
MacBook DS % git pull origin master

remote: Enumerating objects: 13, done.
remote: Counting objects: 100% (13/13), done.
remote: Compressing objects: 100% (10/10), done.
remote: Total 13 (delta 1), reused 12 (delta 0), pack-reused 0
Unpacking objects: 100% (13/13), 5.63 MiB | 3.12 MiB/s, done.
From https://github.com/YiChingLLin/2022DataStructure
* branch          master      -> FETCH_HEAD
* [new branch]     master      -> origin/master
```

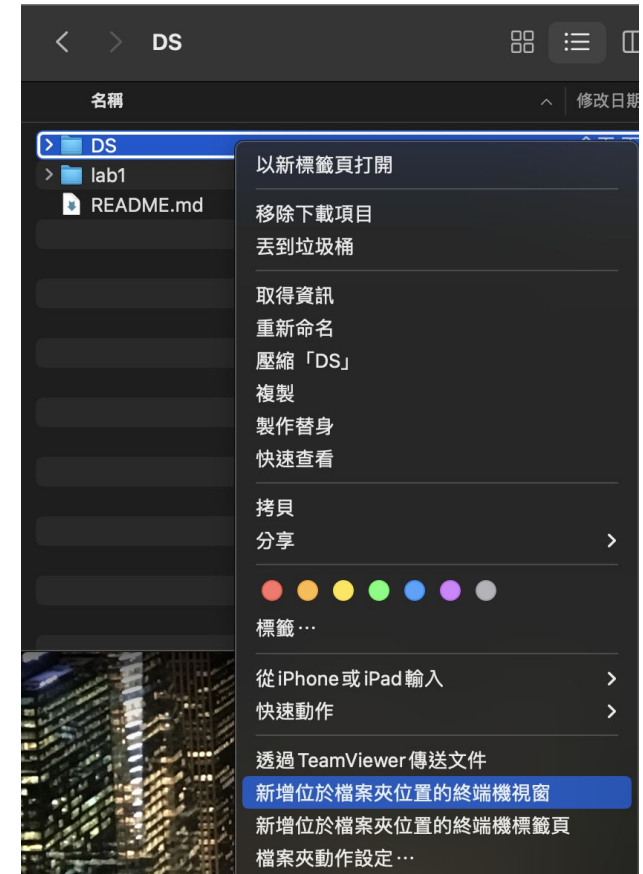
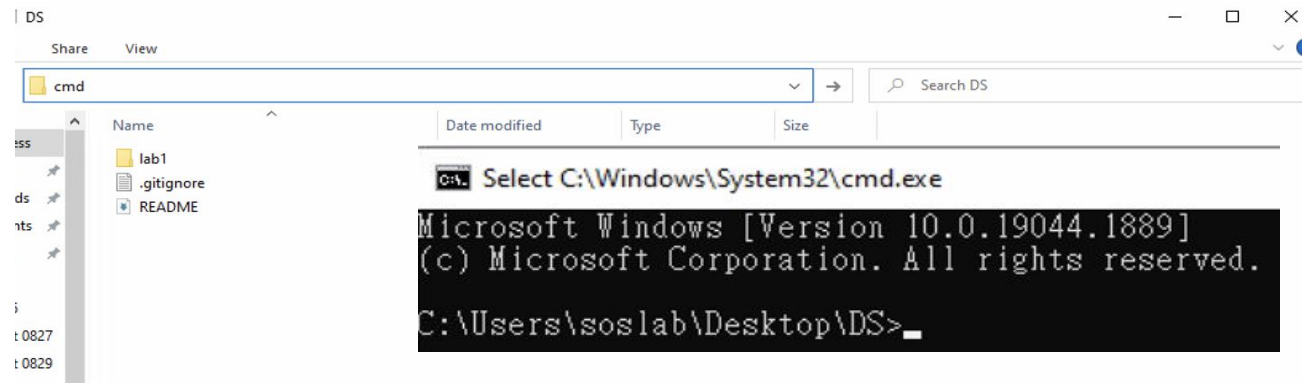
Download Homework

- Next time
In your computer's folder, use the command below :

cd (your folder path)

git pull origin master

then you can refresh the data weekly
to download HW from GitHub.



HW1

Homework 1 (Due on 9/22)

- BMI Calculator:
 - $BMI = (\text{Weight in Kilograms} / (\text{Height in Meters} \times \text{Height in Meters}))$
- Enter Height and Weight, return BMI and
 - “You are not in shape. Actually, you are not even close.” if $BMI \geq 30$
 - “To be honest, you are not in shape.” if $30 > BMI \geq 26$
 - “You are in shape” if $26 > BMI \geq 20$
 - “You are under shape” if $20 > BMI$
- Use Eclipse to write/execute/debug your java code
- Upload your code using WM5 (**no** direct copy accepted)
- TAs will show you “clear” hints to do so on Monday’s lab (Sep. 19)

Input/ Output Example

```
Please enter your weight(kg) and height(cm): 70 150  
You are not in shape. Actually, you are not even close. BMI: 31.11111111111111
```

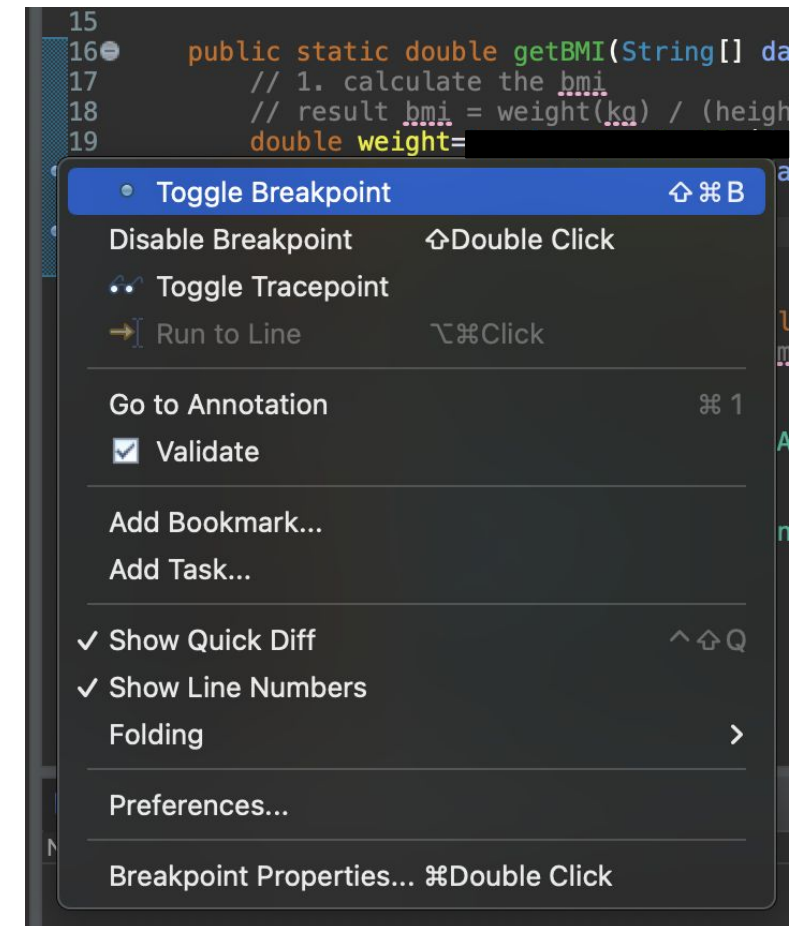
```
Please enter your weight(kg) and height(cm): 60 150  
To be honest, you are not in shape. BMI: 26.666666666666668
```

```
Please enter your weight(kg) and height(cm): 60 160  
You are in shape. BMI: 23.437499999999996
```

```
Please enter your weight(kg) and height(cm): 50 160  
You are under shape. BMI: 19.531249999999996
```

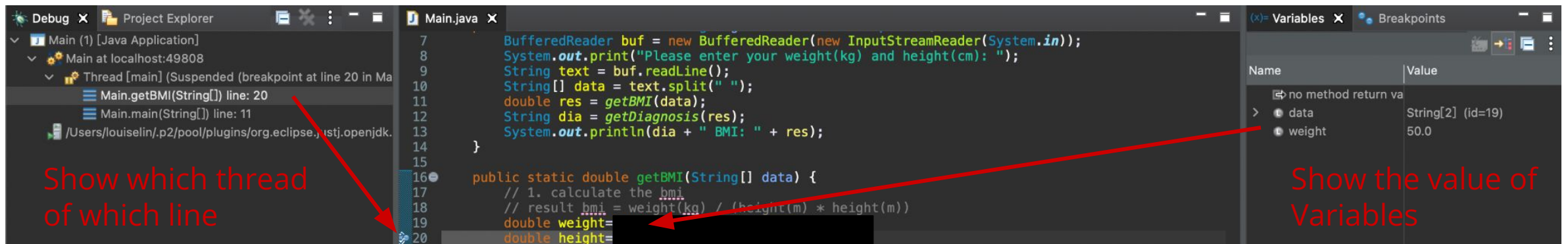
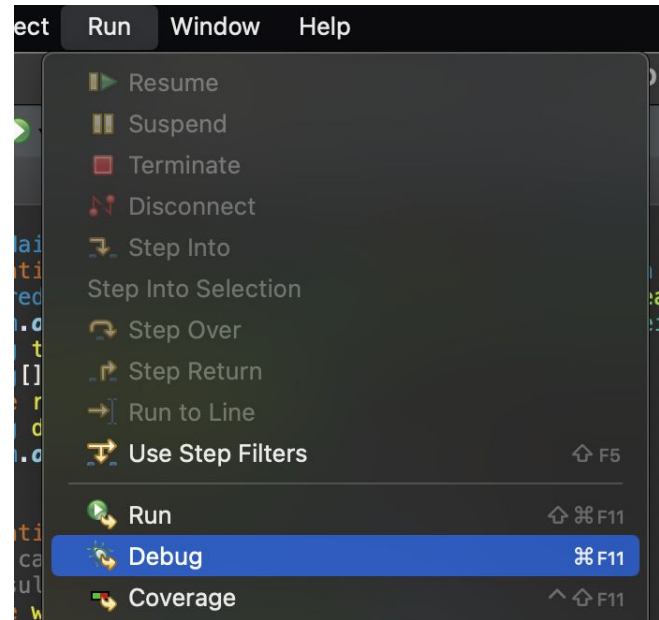
Debug mode

- Setting the Toggle Breakpoint
 1. Right-click the line after you want to trace
 2. Click the Toggle Breakpoint



Debug mode

- Run on Debug mode



Debug mode

Click here to keep running to the next breakpoint

Step Into Step Over Step Return

The screenshot shows the Eclipse IDE in debug mode. The Project Explorer on the left shows the project structure. The Main.java editor in the center shows the code for the BMI calculation. The Variables view on the right shows the current state of variables. The 'bmi' variable is highlighted in red in the Variables view.

Name	Value
no method return va	
data	String[2] (id=19)
weight	50.0
height	1.5
bmi	22.22222222222222

More detail

<https://help.eclipse.org/latest/index.jsp?topic=%2Forg.eclipse.jdt.doc.user%2FgettingStarted%2Fqs-13.htm>

Hand-in HW1

- Via WM5: Already in this course.

- Via Email: Waiting for adding course by teacher.

Send Email to TA 蔣其勸 111356024@nccu.edu.tw

Deadline 9/26(Mon) 23:59

- Send Group list via Google form!