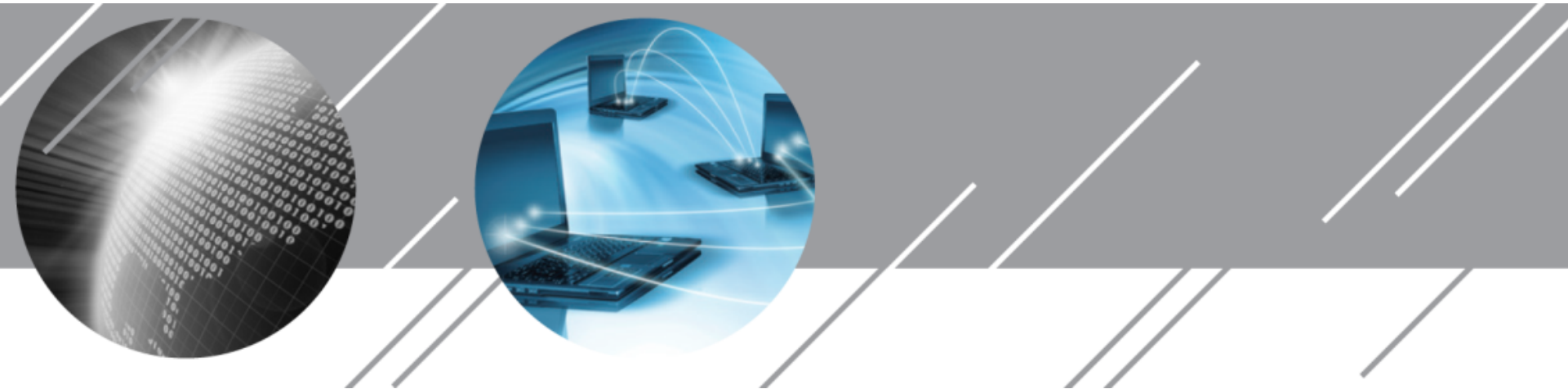


Object Oriented Programming Introduction to Java

Ch. 2

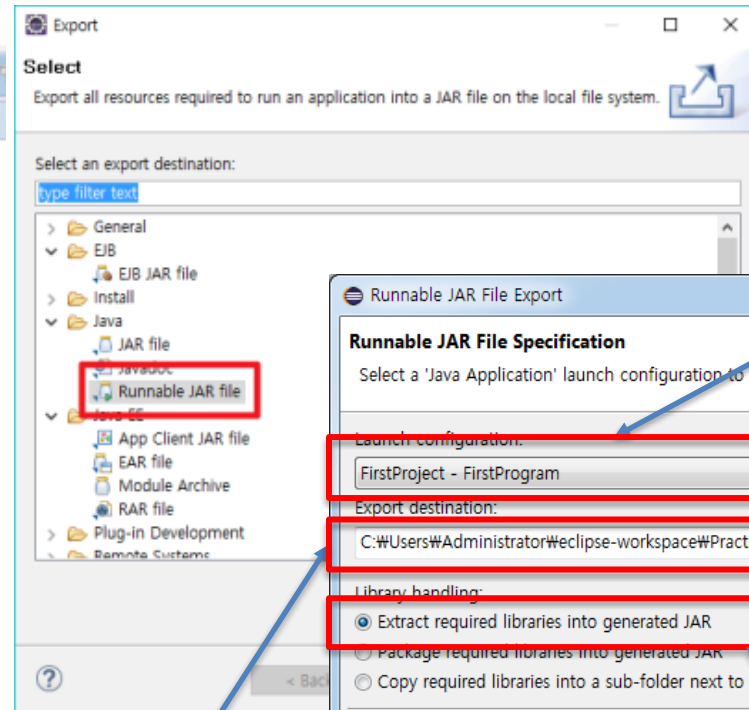
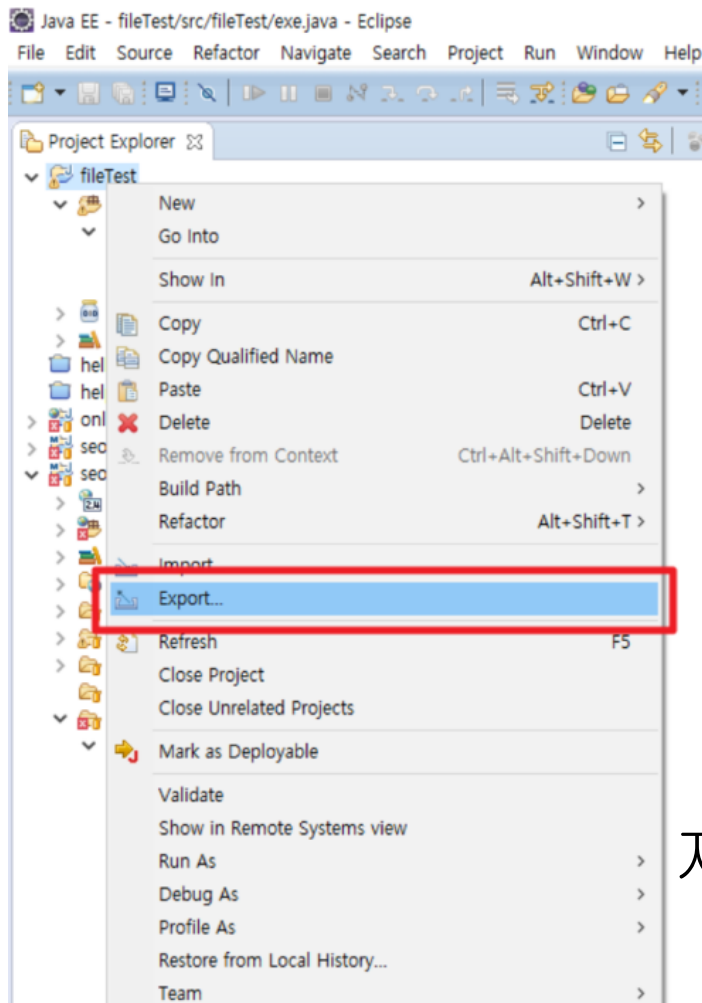


Dept. of Software, Gachon University
Ahyoung Choi, Spring

Homework 1

- Due date: One week
- Programming projects
- Submission form: .jar파일 + 소스파일 제출(.java)
- Submission site: 레포트 제출실
- Requirements
 - Self-documentation (comment) for your programs
 - Comment for each class with `/**` and `*/`.

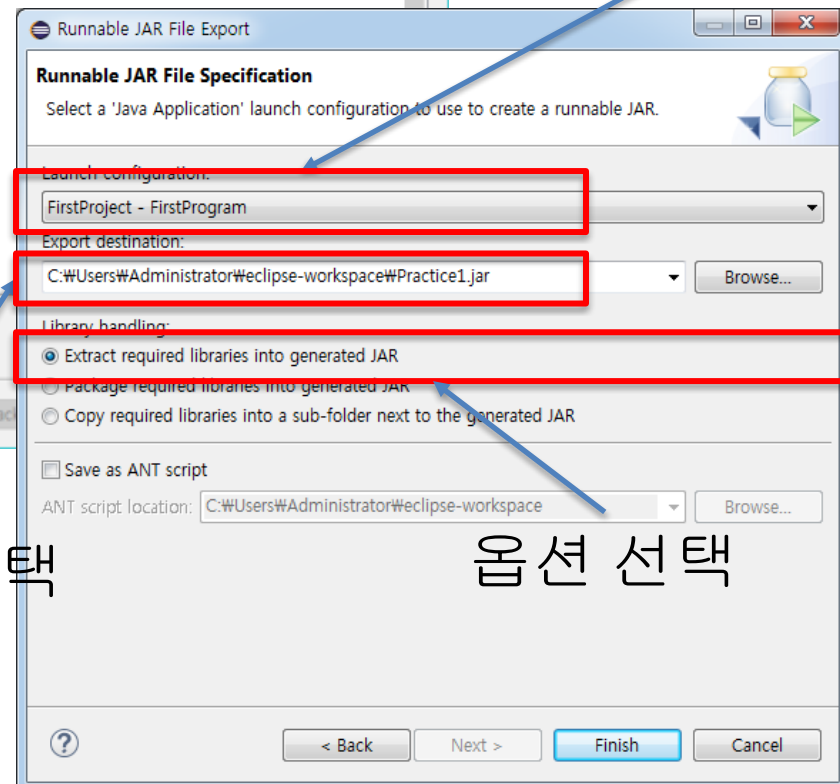
How to make a .jar file



프로젝트 선택

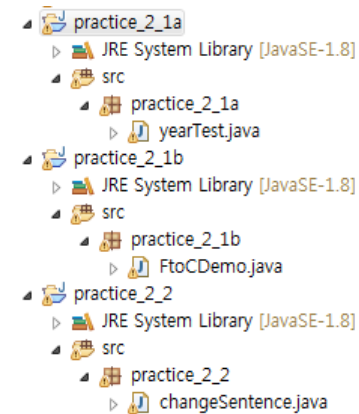
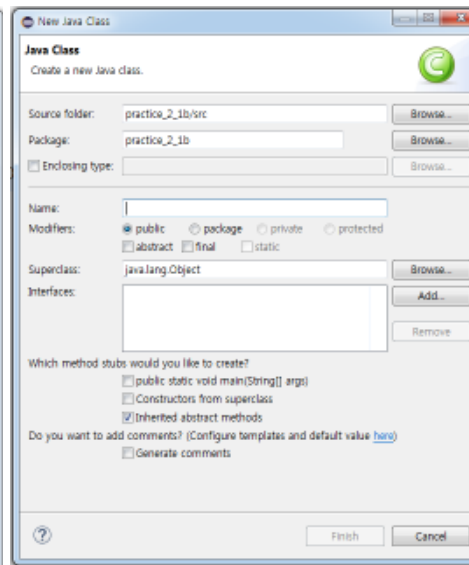
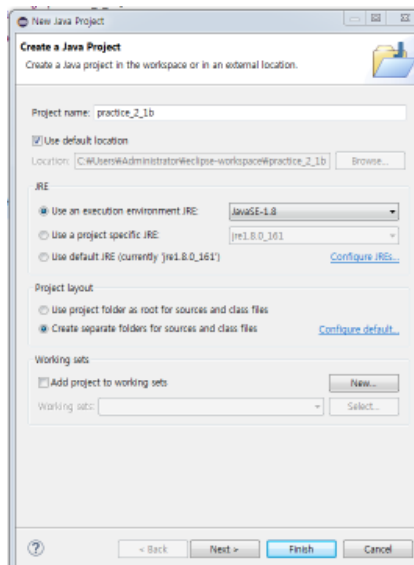
저장 위치 선택

옵션 선택



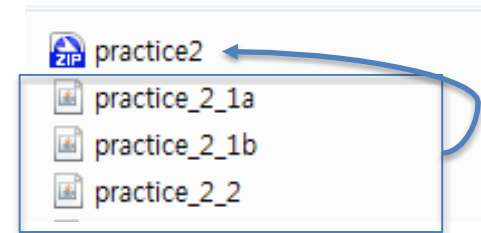
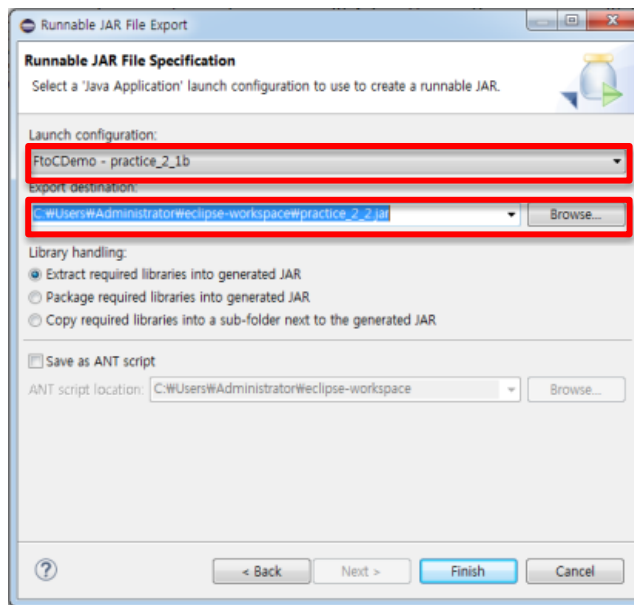
Step 1

- 문제별로 project를 생성



Step 2

- 문제별로 jar 파일 만들기
- Jar 파일들을 압축파일 생성하여 제출



HW 1 -1(Practice 2.1a)

- Ex2_1a. Write a following program.
 - Read a four-digit integer, such as 2017
 - Display one digit per line, e.g., 2, 0, 1, and 7 in each line

HW 1 -2(Practice 2.1b)

- Ex2_1b. Write a following program.
 - Read a temperature in Fahrenheit
 - Compute a temperature in Celsius and print it
 - $C = 5 (F - 32) / 9$

HW 1 -3 (Practice 2.2)

- Ex2_2. Write a following program
 - Read a line of text
 - Move the first word to the end and capitalize the first character, and then print it
 - E.g., “Java is the language” → “Is the language Java”

HW 1 -4 (Practice 2.3)

- Ex2_3a. Write a following program
 - Read the price of an item in cents: a multiple of 5 between 25 and 100, i.e., 25, 30, ..., 95, or 100
 - Assume you paid a **dollar(100 cents)**, and print the number of quarter (25cents), dime (10 cents), and nickel (5 cents) coins for the change
 - E.g., for an item of 45 cents, the change is 55 cents, which is given by 2 quarters, 0 dimes, and 1 nickels

HW 1-5

- Write a program that asks the user to enter his roll number, name, address, and the course he studies. The program should then print the following two lines, with the user's input replacing the items in italics:
 - *Name* has roll no *Roll*,
 - his address is *address* and the course he studies is *course*
- For example, if the user entered Alec Ray as name, 12 as roll number, 10 Down Road as address, and B.S.(Computer Science) as course, then the output would be
 - Alec Ray has roll no. 12,
 - his address is 10 Down Road and the course he studies is B.S.(Computer Science).

HW 1-6

- Write a program that reads a octal number (maximum 3 place) from the keyboard as a string and then converts it into decimal.
 - For example, if the input is 112, the output should be 74.
 - (*Hint:* Break the string into substrings and then convert each substring to a value for a single place. If the values in each place are b_0 , b_1 , and b_2 , the decimal equivalent is $64b_1 + 8b_2 + b_3$.)

HW 1-7

- The Harris-Benedict equation estimates the number of calories your body needs to maintain your weight if you do no exercise. This is called your basal metabolic rate or BMR.
- The calories needed for a woman to maintain her weight is:
 - $BMR = 655 + (4.3 * \text{weight in pounds}) + (4.7 * \text{height in inches}) - (4.7 * \text{age in years})$
- The calories needed for a man to maintain his weight is:
 - $BMR = 66 + (6.3 * \text{weight in pounds}) + (12.9 * \text{height in inches}) - (6.8 * \text{age in years})$
- A typical chocolate bar will contain around 230 calories. Write a program that allows the user to input their weight in pounds, height in inches, and age in years. The program should then output the number of chocolate bars that should be consumed to maintain one's weight for both a woman and a man of the input weight, height, and age.