



Chapter 5 Labs

Shin-Jie Lee (李信杰)

Associate Professor

Computer and Network Center

Department of Computer Science and Information Engineering

National Cheng Kung University



Lab 1

- ☐ For every 3 empty bottles of beverage returned, you will get an extra free bottle. You may borrow empty bottles from others, but if you do that, make sure that you have enough bottles afterwards to return to them.
- ☐ Input a number to represent the number of test cases, then input a number to represent the purchased beverage.
- ☐ The output is the number of drinks that can be drunk at the end.



Lab 1

☐ Sample Input:

3

8

15

20

☐ Sample Output:

12

22

30



Lab 2

- ❑ Please input 3 integers x, y, z and create a class Calculation, including three methods of `int max(int a, int b, int c)`, `int min(int a, int b, int c)` and `double average(int a, int b, int c)`, calculate the maximum, minimum and average of x, y, z and return to main to output the result (the average is round off to the 2nd decimal place).
- ❑ You must write the appropriate main to test whether the above functions can be executed.



Lab 3

- ❑ Create a class Cat, have five method eat(),drink(),meow(),sleep(),play() and one private variable hp initialized in constructor when call eat() and drink(), HP will increase when call sleep() and play(), HP will decrease each method has its own string to print and must show the HP
- ❑ You can see sample main class and sample output below <https://hackmd.io/@phYkSj7TRzG4npHvnzkmQ/Sk8cTSoBr>
- ❑ Optional : make HP not less than 0, when HP = 0:
 1. the cat can still sleep but will not decrease HP
 2. the cat can't play and will show another message