

THE UNIVERSITY OF HONG KONG
COMP1117 Computer Programming I

Assignment 1 (modified on Sept 14)

Deadline: 5:00pm, Sept 23, 2017

You can assume that the input of your program is valid; there is no need to check the validity of the input. There is no need to control the number of decimal places in your output.

1. [30%] Write a program **average.cpp** to read three numbers and store them as three integers. Ignore the smallest number among the three and calculate the average of the remaining two.

Sample runs:

```
2 4 6
5
```

Input/Output format:

<user input number 1><space><user input number 2><space><user input number 3><enter>
<average output><newline>

2. [70%] Pounds and Kilograms are two common units in weighting. Write a program **weight.cpp** to read **an integer and a character**. If the last character is 'l', convert the input from pounds (lb) to kilograms (kg). If the last character is 'k', convert the input from kilograms to pounds. Use the following formula for conversion:
 $1 \text{ kg} = 2.2 \text{ lb}$

Sample runs:

```
100l
100lb = 45.4545kg
```

```
100k
100kg = 220lb
```

You may assume that ~~the first three characters are numbers (but still store them as three characters) and~~ the last character would be either 'l' or 'k'.

Input/Output format:

<user input integer><user input character><enter>

If <user input character> is 'l':

<user input integer>lb<space>=<space><your calculation output>kg<new line>

If <user input character> is 'k':

<user input integer>kg<space>=<space><your calculation output>lb<new line>

Important Notes:

- i. You must write your name and university number as part of the comments at the beginning of your program source code.
- ii. Your programs must follow all the requirements mentioned in the specification.
- iii. Your program must follow the formats of the sample input / output strictly.
- iv. Your program should be properly indented and documented.
- v. You should only submit source codes (*.cpp), not executables.
- vi. You must use the program names as suggested in the specification, i.e., average.cpp and weight.cpp.
- vii. Please make sure that your source code could be compiled in Code::Blocks environment (with the settings mentioned in workshop) before submission.

Handin:

Submit your programs (inch.cpp and check.cpp) electronically using the Moodle system to Assignment 1 – average.cpp and Assignment 1 – weight.cpp correspondingly under Assignments section. Late submission will NOT be accepted.