Lab #2

Notes

Folder organization for solutions on the student's account:

```
Z:\
|
|--Programming01
|----Lab01Problem01
|----Lab01Problem02
|----…
|----Lab02Problem01
|----…
|--Programming02
```

Problem #1: "Swap Two Numbers" (0.5%)

Declare two integer variables (a, b), initialize them with values derived from the standard input, and swap the values between these two variables.

Sample:

```
1st value? 2
2nd value? 3
Before swapping: a = 2; b = 3;
After swapping:  a = 3; b = 2;
```

Problem #2: "Swap (a, b) Without Temporary Variables" (0.5%)

Declare two integer variables (a, b), initialize them with values derived from the standard input, and swap the values between these two variables. In this task, it is prohibited to use temporary variables.

Sample: see task #1

Problem #3: "Sum of Digits" (0.5%)

Read a four-digit integer from the standard input and find the sum of all its digits.

Sample:

```
A four-digit integer? 1237
The sum of all digits is 13
```

Problem #4: "Inches to Centimeters Conversion" (0.5%)

Description: the application converts a specific value consumed from the standard input from inches to centimeters.

Notes:

1 in. = 2.54 cm.

Sample:

```
Length in inches? 17
17 in. = 43.18 cm.
```

Problem #5: "Fahrenheit to Celsius Conversion" (0.5%)

Description: the application implements a simple Fahrenheit to Celsius convertor.

Notes:

[℃] = ([℉] − 32) × 5⁄9

Sample:

```
Temperature in degrees Fahrenheit? 114
The temperature in degrees Celsius is 45.56
```

Home Reading: Liang Introduction to Java Programming 8th ed. 2 Chapter (H:\Courses Information Support\Natural Sciences and Information Technologies\COM 111 Programming I. Intro to OOP\Books)