Programming exercise:

Various Variables

The exercise template contains a program that prints the following:

Sample output

```
Chicken:
3
Bacon (kg):
5.5
Tractor:
None!

And finally, a summary:
3
5.5
None!
```

Modify the program in the given places so that it outputs the following:

Sample output

```
Chicken:
9000
Bacon (kg):
0.1
Tractor:
Zetor

And finally, a summary:
9000
0.1
Zetor
```

Programming exercise:

Integer Input

Write a program that asks the user for a value. The program should then print the value provided by the user.

Here's a couple of examples:

Sample output

```
Give a number:
3
You gave the number 3
```

Sample output

```
Give a number:
42
You gave the number 42
```

Programming exercise:

Double Input

Write a program that asks the user for a floating-point number. The program then prints the user's input value.

Example prints for the program can be seen below:

Sample output

```
Give a number:
3.14
You gave the number 3.14
```

Sample output

```
Give a number:
2.718
You gave the number 2.718
```

Programming exercise:

Different Types of Input

Write a program that asks the user for a string, an integer, a floating-point number, and a boolean*. The program should then print the values given by the user.

Sample output

```
Give a string:
bye-bye
Give an integer:
11
Give a double:
4.2
Give a boolean:
true
You gave the string bye-bye
You gave the integer 11
You gave the double 4.2
You gave the boolean true
```

* boolean trueOrFalse = Boolean.valueOf(scanner.nextLine());

Programming exercise:

Seconds in a day

In the exercise template, implement a program that asks the user for the number of days. After that, the program prints the number of seconds in the given number of days.

Earlier we learned to read an integer in the following manner:

```
Scanner scanner = new Scanner(System.in);

System.out.println("Give a number:");
int number = Integer.valueOf(scanner.nextLine());
System.out.println("You gave " + number);
```

Examples of expected output:

Sample output

```
How many days would you like to convert to seconds?
1
86400
```

Sample output

```
How many days would you like to convert to seconds?
3
259200
```

Sample output

```
How many days would you like to convert to seconds?
7
604800
```

Programming exercise:

Sum of three numbers

Write a program that asks the user for three numbers. After this the program prints the sum of the numbers given by the user.

The program should work like this:

Sample output

```
Give the first number:
8
Give the second number:
3
Give the third number:
3
The sum of the numbers is 14
```

Sample output

```
Give the first number:
3
Give the second number:
-1
Give the third number:
2
The sum of the numbers is 4
```

Programming exercise:

Multiplication formula

Similar to the previous exercise, create a program that multiplies the values stored in two integer variables.

For instance, if the entered numbers are 2 and 8, the program should print the following:

Sample output

```
Give the first number:
2
Give the second number:
8
2 * 8 = 16
```

Likewise, if the entered numbers are 277 and 111, the print should be the following:

Sample output

```
Give the first number:
277
Give the second number:
111
277 * 111 = 30747
```

Programming exercise:

Average of three numbers

Write a program that asks the user for three integers and prints their average.

Sample output

```
Give the first number:
8
Give the second number:
2
Give the third number:
3
The average is 4.333333333333333
```

Sample output

```
Give the first number:
9
Give the second number:
5
Give the third number:
-1
The average is 4.333333333333333
```

Programming exercise:

Simple calculator

Write a program that asks the user for two numbers and prints their sum, difference, product, and quotient. Two examples of the execution of the program are given below.

Sample output

```
Give the first number:
8
Give the second number:
2
8 + 2 = 10
8 - 2 = 6
8 * 2 = 16
8 / 2 = 4.0
```

Sample output

```
Give the first number:
9
Give the second number:
2
9 + 2 = 11
9 - 2 = 7
9 * 2 = 18
9 / 2 = 4.5
```