Question 1. Accessing Linux in the lab. Not to be submitted.

On your computer in the lab (MSU's computer; not your personal computer) open a Linux host. See instructions on ***accessing-linux-in-lab*** on course content page on D2L This file may have been changed -- go to D2L to access the latest version.

Make a preliminary code on there, compile it, execute it. All instructions are present in the above-mentioned file.

Show the lab instructor your progress.

We will develop programs in the lab in this way.

Question 2. Code to be submitted -- to be written on Linux that we just started working on.

5 points for coding.
If you show your code to your lab instructor before the end of the lab, you get your coding score added to attendance.
100 attempts total.

Modulo operation on integers. And integer division.

Background A.

In class, we used the following instruction, e.g., to get a floating point number as input and store it in a variable `n`.

```
scanf("%f", &n);
```

If we want to input an integer, we will have to create an `int` variable, e.g., `num`. We can take input in this way.

```
scanf("%d", &num);
```

Background B.

We performed some operations on numbers in class. Chief among the possible operations on an integer are addition, multiplication, subtraction, division and modulo.

Here we discuss the modulo operation.

A modulo operation on an integer `num` can be performed as follows.

```
int rem = num % 3;
```

The modulo operation computes the **remainder** after division. So,
if `num` is `11`, then `rem` will become `2`,
if `num` is `21`, then `rem` will become `0`,
if `num` is `19`, then `rem` will become `1`,
if `num` is `6`, then `rem` will become `0`,
and so on.

Background C.

If `n` is a floating point number, and if you divide it by another number, then the answer will come in decimal. For example

if a floating point `n` is `100.0`, then `n/13` will become `7.692307`.

However if a variable `num` is an integer, and if you divide it by another integer, then the output will be integer. This is called **integer division**. For example,

if an integer `num` is `100`, then `n/13` will be `7`.

Assignment.

1. Declare an integer `int days`.
1. Ask the user to input the number of days. Save the input in `days`. Refer to integer input from background A.
2. Declare an integer `int years`. Compute in `years` the number of years in `days`. Refer to integer division from Background C. Assume that a year has 365 days flat. Print the number of years in `years`.
3. Change the value of `days`: compute the number of the remaining days. Refer to modulo operation from Background B.
4. Declare an integer `int weeks`. Compute in `weeks` the number of weeks in `days`. Again, refer to integer division from Background C. Print the number of weeks in `weeks`.
5. Change the value of `days`: compute the number of the outstanding days. Again, refer to modulo operation from Background B. Print the number of days.

Sample Program Execution:

```
Enter the number of days:
1000
No. of years: 2
No. of weeks: 38
No. of days: 4
```