Lab-2 Ex3 - Modulus

> *In the academic honesty declaration along with your template program, please fill in your name, student ID, class section and date in the appropriate locations before you proceed with the exercises. Thank you for your co-operation.*

In the lecture, you learned of an operator called the **modulus operator** (`'%'`). If you recall, the modulus operator can help you find the remainder of an integer division.

Below you will find the step-by-step of a C program that finds out the ***most significant digit*** **(MSD)** and the ***least significant digit*** **(MSD)** of a 3-digit integer input. Assume the user always inputs a valid 3-digit number.

For instance, for the number 450, the MSD is 4, and the LSD is 0. For the number 999, MSD is 9, and LSD is also 9.

Please follow the step-by-step hints here to help you finish the exercise (officially it's called **pseudocode**):

```
declare the variables

print "Input a 3 digit number: "

obtain integer "input" from user

MSD = input / 100 (e.g. 450 / 100 is 4)

LSD = input % 10 (e.g. remainder of 450 / 10 is 0)

print MSD and LSD
```

Your program should follow the exact behavior depicted in the following sample runs.

Sample Run #1 (user input is bolded and in italic)

```
Input a 3 digit number: 123

MSD: 1

LSD: 3
```

Sample Run #2 (user input is bolded and in italic)

```
Input a 3 digit number: 500

MSD: 5

LSD: 0
```