# Laboratory 2: Basic Elements of C

This lab is designed to get you familiar with some basic elements of C programming. More specifically, you will learn some data types, operators, and a simple branching statement. After this lab, you are expected to be able to solve simple calculation problems and print plain patterns.

## Problem: Print "O" or "E"

- **Problem description**

  Write a program to print different patterns according to parity (odd or even). Given two integer numbers *a* and *b*. If *(a\*b) - (a/b)* is odd, then print "O". Otherwise, print "E".

- **Input & output requirements**

  The two input numbers are separated by a space. Outputs of the program are expected to follow the format as shown in sample results.

- **Sample results**

  Sample 1

  Please input two integers: 5 3↵

  ```
  ********
  *
  *
  ********
  *
  *
  ********
  ```

  Sample 2

  Please input two integers: 5 4↵

  ```
  ******
  *    *
  *    *
  *    *
  *    *
  *    *
  ******
  ```

- **Tips:**

  a) 1, 3, 5 … are odd numbers; and 2, 4, 6… are even numbers. If ( n%2 == 1 ), then n is an odd number.

  b) Any special cases, e.g., what if b = 0?