# Lab 7

## Conditional Statements (Cont.)
## And Iterations in C

Marks: 5

## Question 01:

Write a program to find the largest factor of a user given number. (apart from the number itself).

```
Enter a positive integer to find its largest factor: 12
The largest factor of 12 is: 6
```

## Question 02:

Calculate the Product of two numbers WITHOUT using the * operator

## Question 03:

Draw the following pattern of divisor, it should print a pattern of asterisks where the $i$th row has an asterisk in each position corresponding to divisors of $i$ (the same holds true for the columns).

```
enter N value
10

* * * * * * * * * * 1
* *   *   *   *   * 2
*   *     *     *   3
* *   *       *     4
*       *         * 5
* * *     *         6
*           *       7
* *   *       *     8
*   *           *   9
* *       *     * 10
----------------------------------
```

## Question 04:

Write a program to determine the smallest integer N such that $N^3 - 2N^2 > 100000$

**Question 05:**

Write a program that accept a dialing code and return the corresponding country and city name.

```
Enter the dialing code: 92213
Country: Pakistan
City: Karachi
```