GEDIZUNIVERSITY

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Faculty of Engineering and Architecture

Computer Engineering Department

COM 101 – INTRODUCTION TO PROGRAMMING

LAB Assignment   #3

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A- Example

Write a C program that compares two numbers specified by the user, and prints out the comparison result.

B- Exercises

Note that when you doing exercise questions, you are expected to use good programming practices you learn up to that time.

1- Write C program that has the same functionality with the following C code. However, you are supposed to use another conditional instead of using if-else statements.

```c
#include <stdio.h>
#include <stdlib.h>
/*
 * This program calculates letter of grades.
 * Author: Feyza Galip
 * Date: 22/10/2015
 */
int main()
{
    if ( grade >= 90 )
        puts( "A" );
    else if ( grade >= 80 )
        puts( "B" );
```

```
        else if ( grade >= 70 )
            puts( "C" );
        else if ( grade >= 60 )
            puts( "D" );
        else
            puts( "F" );


    }
```

2- Write a functional calculator that does some simple arithmetic operation such as addition, subtraction, division and multiplication, and evaluates some mathematical functions such as taking logarithm, square root and a power of a number.
Note that you have to ask for the operators(**+, -, *** and **/**) or functions **l,s,^** (logarithm, square root and power of a number, respectively) from the user. Also, you have to send the user meaningful messages when you obtaining the numbers and operators.

```
*****This program is a calculator for two numbers.*****

Please enter one of these operations:
 +, -, *, /, ^, s (square root), l (logarithm)
^
Please enter two numbers for ^ operation:
4
2
4.00 ^ 2.00 = 16.00

Process returned 20 (0x14)    execution time : 16.580 s
Press any key to continue.
```