Course	INFO-6101 [Integrated Systems and Micro Controllers]		
Lab#2	**C Language Programs**		
Due Date	See Submission Folder Due Date on FOL		
Submitting	See instruction at the bottom of the page		
Professor	**Ahmed Mukhlis**		
Student name		**Student #**	

How will my Lab be marked?

This Lab accounts for 5% of your final mark and will be marked as follows:

Evaluation will take place in Class during the experiment

INFO-6101 - Integrated Systems and Micro Controllers												
1	0%			6			3				Final Mark	Feedback
				P1 (2)	P2 (2)	P3 (2)	1	1	1		10%	
Attendance & attempt	Hardware			Software Code			Operation					
Over all. Documents labeled with course ID, Project Name, team memeber and is proofread for spelling, grammar, etc.	N\A			Commands	Structure	Code	Running	Compilation	Results			

How should I submit my Assignment?

Electronic Submission (mandatory): This is an individual Lab and each one of you will submit a Word File and upload it to the Dropbox: “Lab#2”.

Require the code for Program 1, 2 & 3

Please ensure that you submit your lab on time otherwise your mark will be affected

Experiment Description

Write simple Programs in C Language.

In this lab, you will practice Decision control statement, Loops, Array & function

Write the C code & run the following examples first, then complete Program 1,2 & 3 in C language, run them & submit your work

Example 1 Program to check whether the given integer is positive or negative

```c
#include <stdio.h>
void main()
{
	int num;
	printf("Enter a number: \n");
	scanf_s("%d", &num);
	if (num > 0)
		printf("%d is a positive number \n", num);
	else if (num < 0)
		printf("%d is a negative number \n", num);
	else
		printf("0 is neither positive nor negative");
}
```

Example 2 Program to find largest element of an array

```c
#include <stdio.h>
/* This is our function to find the largest element in the array arr[]
int largest_element(int arr[], int num)
{
    int i, max_element;

    max_element = arr[0];   // Initialization to the first array element

    /* Here we are comparing max_element with
     * all other elements of array to store the
     * largest element in the max_element variable
     */
    for (i = 1; i < num; i++)
        if (arr[i] > max_element)
            max_element = arr[i];

    return max_element;
}

int main()
{
    int arr[] = {1, 24, 145, 20, 8, -101, 300};
    int n = sizeof(arr)/sizeof(arr[0]);
    printf("Largest element of array is %d", largest_element(arr, n));
    return 0;
}
```

Program 1

Write a program in C language to check if the entered number is odd or even

Program 2

Write a program in C language to display the product and the average of two float numbers

Program 3

Write a program in C to display only the even numbers from 0 to 20.