



BIRZEIT UNIVERSITY

Computer Science Department

COMP133 (Second Semester 2020/2021)

Assignment # 1 Due Date: Thursday(15/4/2021) 11:59 PM on *Ritaj Only*

Notes:

1. Submit your assignment (main.c File) through Ritaj only by replying on a message called **Assignment 1 solution** .
2. The assignment should be submitted on the due date, late submission will NOT be accepted for any reason.
3. The assignment is individual effort. Copying the assignment will be treated as a cheating attempt, which may lead to fail the course.

(Late Assignments will not be accepted for any reason)

Magic Number Programming:

Magic program ask user to enter three integers by the user, the three integers represent left bound, right bound and arbitrary digit 'm', where left bound is less than right bound. Program should print all magic numbers in the given range that doesn't contain digit 'm'. The number is magic if its every digit is larger than the sum of digits which are on the right side of that digit. For example, 94210 is magic number because $1 > 0$, $2 > 1+0$, $4 > 2+1+0$, and $9 > 4+2+1+0$.

Write a complete C program that Call **only One Function** (magic_numbers) that will print all magic numbers excluding a given digit 'm' that also entered by user ?

Input Sample :

Enter Left bound: 740

Enter Right bound:850

Enter digit to exclude it:2

Output sample:

Magic Numbers in Range Left=740, Right=850 with exclude digit m= 2 are:

740 741 750 751 760 810 830 831 840 841 843 850

Your function prototype is like this:

void magic_numbers(**int** left, **int** right, **int** digit) ;