# TCES 201
# Introduction to Computer Programming
# Homework 4 – Pointers & Arrays
# 20 Points

This homework tests your understanding of the topics covered in the fifth and sixth weeks related to C Programming – Pointers and Arrays.

CES Airline has just purchased a computer for its new automated reservations system. The president has asked you to program the new system. You'll write a program to assign seats on each flight of the airline's only plane (capacity: 10 seats). Your program should display a menu of alternatives:

>       Please type 1 for first class
>       Please type 2 for economy
>       Please type 3 for seat chart
>       Please type 4 to quit

If the person types 1, then your program should assign a seat in the first class section (seats 1– 5). If the person types 2, then your program should assign a seat in the economy section (seats 6– 10).  Your program should then print a boarding pass indicating the person's seat number and whether it's in the first class or economy section of the plane. Use a single-subscripted array to represent the seating chart of the plane. Initialize all the elements of the array to 0 to indicate that all seats are empty. As each seat is assigned, set the corresponding element of the array to 1 to indicate that the seat is no longer available. Your program should, of course, never assign a seat that has already been assigned. When the first class section is full, your program should ask the person if it's acceptable to be placed in the economy section (and vice versa). If yes, then make the appropriate seat assignment. If no, then print the message "Next flight leaves in 3 hours."

The starter code (**ces_airline.c**) is provided with the homework along with an executable to check the functionality. Please run the executable to understand the behavior. Do not modify the main or assign functions. Write the code for the other functions that main and assign call or use.

**Submission Instructions:** Submit the code on Canvas under hw4 Submission link.

Each program must contain a header in the following format modified for the corresponding homework.

>       /*      Menaka Abraham
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>               Autumn 2014
>               This program prints a simple Hello World to the console.
>       */