**Assignment 4 (due date: 11/12/2021)**

In this assignment you will ask to do coding in C using pointers, function, iteration, and arrays (compile and run).

Please submit your assignment into Canvas. Please submit the codes as .c files or copy them all into a single word (.doc or .docx) file but make sure that they are ready to be compiled. It is strongly recommended to write these codes in terms of functions! Please DO NOT submit pdf.

1: ***(Card Shuffling and Dealing)*** Modify the program in Fig. 7.24 so that the card-dealing function deals a five-card poker hand. Then write the following additional functions:

a) Determine whether the hand contains a pair.

b) Determine whether the hand contains three of a kind (e.g., three jacks).

c) Determine whether the hand contains four of a kind (e.g., four aces).

d) Determine whether the hand contains a flush (i.e., all five cards of the same suit).

2: ***(Project: Card Shuffling and Dealing)*** Use the functions developed in Exercise 1 to write a program that deals two five-card poker hands, evaluates each, and determines which is the better hand.