

CS 150 Lab 13

More Arrays and Functions

The purpose of today's lab is for you to implement part of the abstract card game bridge that we have been discussing in class the last couple of days.

- Be sure your output looks exactly like the specified output
- Be sure to submit your solution to **CS150-02 Drop** before you leave lab today
- Show the instructor or TA your solution to each function before going on

Lab 13

In the folder CS150-02 Public, you will find a file called lab13.cpp which contains a C++ program that has several function prototypes and a main function that contains code to test the function definitions that you must write.

Write a complete C++ program in a project **13_1_Cards** that will create an empty file main.cpp. Then copy all of the code from lab13.cpp into main.cpp. Finally write the function definition for each function prototype one at a time IN THE ORDER LISTED. Test each function one at a time by commenting out the code in main.cpp that makes calls to functions that are not yet written.

There are actually two testcases where the first testcase initializes a deck of cards, deals a card, prints a denomination, prints a suit, and then prints a card. The results of running this testcase is:

```
***** Fun With Cards*****  
  
Denomination: 2  
Suit: ♠  
Card: 2♠  
Pretty Cool Huh!!!!  
Press any key to continue . . .
```

The results of running the second testcase is:

```
***** Random Bridge Hands*****  
  
NORTH: 6♣ Q♣ 9♠ J♣ 4♦ 8♥ K♥ K♦ 3♠ 5♥ A♠ 5♣ 6♠  
WEST: A♠ Q♥ 4♥ J♠ Q♠ 4♣ K♠ 9♦ 7♦ 6♦ 2♥ 10♣ 2♣  
EAST: A♥ 3♣ 9♥ 4♠ K♠ 8♦ 5♦ 2♠ 10♠ 3♦ 6♥ Q♦ 9♣  
SOUTH: 5♠ J♦ 8♠ 2♦ 7♥ J♥ 7♠ 10♦ A♦ 7♣ 10♥ 8♠ 3♥  
Press any key to continue . . .
```

- 1) Your program is to compile without any errors or warnings
- 2) Do not document the functions for this lab only. Only supply documentation for the entire program.
- 3) Drop your solution PUNetIDLabs into the CS150-02 Drop folder on Turing before leaving class today even if you have not completed all of the functions. Your program must compile and run. Your solution is to have ALL previous projects completely working and correct.