

**CS620: Applied Algorithms, Fall 2018**  
**Weisberg Division of Computer Science, Marshall University**  
**Assignment 06**  
**Total Points: 50**  
**Due: 4:00 p.m., Nov 12**

1. Use divide and conquer algorithm to implement counting inversions problem with input sequence [4, 2, 1, 3, 7, 6, 5, 8], and display the number of inversions. **[50 pts]**

**(Note 1: For all questions, please use hard coding, which means you can provide the input in the program. Please do not ask user to enter any value. Please let me know if you have any question. Thanks.)**

**(Note 2: For each question, you only submit one source file. In this assignment, we have one question, so you will submit one source file on Blackboard. The programming language does not matter. Please let me know if you have any question. Thanks.)**