Homework 1: Introduction to Algorithmic Analysis and recurrence

Author: Gabriel Hofer

CSC-372 Analysis of Algorithms

Instructor: Dr. R

Section 1 DUE: Thursday, Aug 27th, at 7AM
Section 2 DUE: Thursday, Sept 3 th, at 7AM

Department: Computer Science and Engineering
University: South Dakota School of Mines and Technology

1 Introductory Information

1. (3 pt) How soon do you need to notify me for a normal extension? 36 hours

2. (3 pt) How many projects will there be? 5 projects

3. (3 pt) How long do you have to notify me for a possible grading error, starting when? the grade One week

4. (3 pt) What is the ONLY option to bring up your grade at the end of the semester? Se Take the optional second chance

5. (8 pt) When did you attend ZOOM office hours after Aug 19 (this will confirmed later)? August 20, 2020

6. (3 pt) Should your microphones/video initially be on or off when attending a Zoom recitation/office hours. Start with camera and microphone off.

7. (3 pt) What topic(s) are tentatively planned for Oct. 9? F: Closest Pair of points

8. (3 pt) At minimum view, the entry quiz (competition is not required)

9. 9. (6 pt) What is the run time for the following code. You MUST show your work for any credit Run Time = O(x * y * z * n)

2 Coding

a. (40 pt) CODE the books version of insertion sort and merge sort. Mark these with comments in the format; GRADING: INSERT and GRADING: MERGE, respectively. This is so we can check the code quickly. Accuracy checked with correct input
output.