Riley Campbell CSC 372 Project 1a

- 1. No less than 36 hours before its due, with a legit reason
- 2. Five
- 3. Within a week of grades being posted
- 4. A take-home/online exam open at the end of the semester
- 5. 8/21/2020
- 6. Off
- 7. Closest pair of points
- 8. Finished it
- 9. Let A be an array of size n for a in the range of 1 to x → O(x) for b in the range of 1 to y → O(y) for c in the range of 1 to z → O(z) print all of A → O(n)

$$O(x) * O(y) * O(z) * O(n) = O(xyxn)$$

Recorded run times

Size	Insert	Merge
2	1	13
4	2	39
6	3	66
8	5	94
10	6	125
12	8	157
14	9	186
16	10	216
18	12	250
20	13	283
22	15	322
24	16	350
26	18	415
28	19	469
30	20	446
32	35	487
34	23	538
36	25	550
38	26	636
40	27	724
42	29	669
44	30	691
46	32	730
48	33	782
50	35	802
52	36	828
54	32	757
56	33	785
58	35	816
60	36	938
62	37	882
64	38	1122
66	37	852
68	36	1274
70	37	990

72	38	969
74	39	985
76	40	1028
78	41	1065
80	42	1129
82	52	1274
84	45	1162
86	46	1342
88	47	1304
90	51	1257
92	54	1289
94	53	1474
96	61	1346
98	52	1350
100	53	1530

