CS 302 Introduction to Data Structures
University of Nevada, Las Vegas
Spring 18

Assignment 2
Due: Saturday, February 3, 2018, by email

1. (a) Work out exercise 1.8 (a) and (b).
   (b) Work out exercise 1.12.

2. Work out the the Big-Oh running times for the code segments (3) - (5) of 2.7. Use summations to show your result.

Hint on Friday

3. Order the Big-Oh growth rates of exercise 2.1. Use L'Hospital's Rule to compare the Big-Oh functions.

4. Work out exercise 2.11.

5. Work out exercise 2.14 (c).

6. Give the order of the following module as a function of n.

```
example(n: integer);
 { for (int i=1; i<= n; i++)
   for (int j=1; j<= n; j++)
    for (int k=1; k<=n; k++)
          if ((k==j) && (j==i))
                  for (int s=1; s<= n*n; s++)
 }
```

7. Answer 2.25 (a) and (b).

How to submit. Create one PDF file with your solutions. Email this file as an attachment to the TA, Mr. Kaushik Deshmukh, deshmk1@unlv.nevada.edu. Subject of your email must be "Assignment 2", <your name>, <your student ID number>.