**CSC 311 Fall 2019 Assignment 3**

**Individual work, 100 points, due noon (12:00pm), Tuesday, November 04, 2019.**

**Please type your answer into a word file and upload it to Blackboard. Also, please present all algorithms using the pseudo format in the Neapolitan Foundations of Algorithms text book.**

(12 points) Foundations of Algorithms, Appendix B, Exercise Problem 1. (Parts a, b, e-h)

b)

e)

f)

g)

h)

(3 points) Foundations of Algorithms, Appendix B, Exercise Problem 2.

(2 points) Foundations of Algorithms, Appendix B, Exercise Problem 4.

(3 points) Foundations of Algorithms, Appendix B, Exercise Problem 5.

(4 points) Foundations of Algorithms, Appendix B, Exercise Problem 8.

int computeSum() {

int sum = 1;

for (int i = 0; i < n; i++ {  
 sum += 2\*i – 1;

}

return sum;

}

**(3 points) Foundations of Algorithms, Appendix B, Exercise Problem 10.**

4,5,6, and 8 are already completed.

**(8 points) Foundations of Algorithms, Appendix B, Exercise Problem 12.**

a)

b)

c)

d)

**(8 points) Foundations of Algorithms, Appendix B, Exercise Problem 15.**

a)

b)

c)

d)

**(10 points) Foundations of Algorithms, Appendix B, Exercise Problem 19.**

a)

b)

c)

d)

e)

(6 points) Foundations of Algorithms, Appendix B, Exercise Problem 24.

a)

b)

c)

(4 points) Foundations of Algorithms, Appendix B, Exercise Problem 25.

a)

b)

**(6 points) Recursive Programming Chapter 3, Exercise 3.10.**

a)

b)

c)

**(3 points) Recursive Programming Chapter 3, Exercise 3.11.**

**(3 points) Recursive Programming Chapter 3, Exercise 3.12.**

**(3 points) Recursive Programming Chapter 3, Exercise 3.13.**

**(3 points) Recursive Programming Chapter 3, Exercise 3.15.**

**(3 points) Recursive Programming Chapter 3, Exercise 3.16.**

**(16 points) Recursive Programming Chapter 3, Exercise 3.18. (Parts c-j)**

c)

d)

e)

f)

g)

h)

i)

j)