**CSE 212 – Programming with Data Structures**

**W10 Prove – Response Document**

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**Question 1: Provide the outline for the data structures tutorial you are creating for the final project. Use the Python Fundamentals Tutorial outline provided in the assignment instructions as an example.**

I. Welcome

* 1. Introduction
  2. Contact

II. Stack

a. Introduction

1. What is a stack

2. Applications

b. Creating a stack

c. Basic operations

1. push

2. pop

3. peek

4. is\_empty

5. size

d. Example

e. Problem to solve

III. LinkedList

a. Introduction

1. What is a linked list

2. Applications

b. Creating a linked list

c. Basic operations

1. Traversing a linked list

2. Inserting a node

3. Removing a node

d. Example

e. Problem to solve

IV. Tree

a. Introduction

1. What is a tree

2. Applications

b. Parts of a tree

c. Creating a tree

d. Basic operations on a tree

1. Traversing the tree

2. Inserting an element

3. Removing an element

4. Searching for an element

e. Example

f. Problem to solve