1.

Question 1

You wish to store a list of grades for a class. Given the choice between a set and a list, which is the more appropriate data structure?

1 / 1 point

Set

Either would do

List

Correct

Correct. A list will allow you to store repeating instances of data.

2.

Question 2

In relation to data structures what does mutability mean?

1 / 1 point

It means that once an object is created it cannot be changed.

It relates to dynamic programming languages, and it can be passed as a variable to a function.

It means that it can be changed after it has been created.

Correct

That’s correct. It relates to the ability to be able to change a value after it has been instantiated.

3.

Question 3

LIFO and FILO mean the same thing?

1 / 1 point

True

False

Correct

That’s correct. FILO (First In Last Out) is another way of saying LIFO (Last in First Out).

4.

Question 4

Creating a class through the use of a capital T as below:

Stack<T>, is an example of what?

1 / 1 point

Generics

Immutability

Encapsulation

Correct

That’s correct. In this way, the object created from the class need not be confined to one specific type until compile time.

5.

Question 5

On what type of data structure would one do a depth first search?

1 / 1 point

Lists

Stacks

Trees

Correct

That's correct. A tree is a series of interconnected nodes that build under one root node. Doing a depth first search, is to follow one branch of nodes to the very deepest one.