Congratulations! You passed!

Grade received 100% **To pass** 80% or higher

Go to next item

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**

- (•) List
- ( ) Set
- ( ) Either would do

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

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 means that it can be changed after it has been created.
- ( ) It relates to dynamic programming languages, and it can be passed as a variable to a function.

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

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. Creating a class through the use of a capital T as below: **1 / 1 point**

`Stack<T>`, is an example of what?

- ( ) Immutability
- (•) Generics
- ( ) 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. 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.