Assignment 6-8

1	Create a generic Pair class that holds two objects of any type. Implement methods to get and set these objects. **[CO4, Evaluate level]**
2	Implement a generic stack class with methods push, pop, and peek. Ensure it works with any type. **[CO5, Create level]**
3	Implement a generic singly linked list with methods to add, remove, and find elements.. **[CO4, Evaluate level]**
4	Create a generic method findMax that takes an array of Comparable objects and returns the maximum element. **[CO5, Create level]]**
5	Define a generic interface Arithmetic with methods for addition, subtraction, multiplication, and division. Implement this interface for Integer and Double. **[CO5, Create level]**
6	Create a generic class Box that can hold objects of any type but restrict it to types that implement the Comparable interface. Provide a method to compare the stored object with another object.
7	Implement a generic method swap that takes an array and two indices, and swaps the elements at those indices.
8	Create a generic method merge that takes two lists of any type and returns a new list containing all elements from both lists.
9	You are given two sorted lists of elements, and you need to merge them into a single sorted list. The lists can contain elements of any type that implements Comparable. Implement a generic method to merge these lists.
10	Implement a generic method that finds the maximum element in a list of elements. The list can contain elements of any type that implements Comparable. Use wildcards to handle lists of any subtype.