Assignment 4

■ Generics

1. Describe the problem generics address.
Generics solve the problem that when we want to create a method or class with same functionality but for different input data types.

2. How would you create a list of strings, using the generic List class?
List<string> list = new List<string>();

3. How many generic type parameters does the Dictionary class have?
2 parameters, which are keys and values.

4. True/False. When a generic class has multiple type parameters, they must all match.
True

5. What method is used to add items to a List object?
Add()/AddRange()/Insert()/InsertRange()

6. Name two methods that cause items to be removed from a List.
Remove()/RemoveAt()/RemoveRange()

7. How do you indicate that a class has a generic type parameter?
A generic type is declared by specifying a type parameter in an angle brackets after a type name, e.g. TypeName<T> where T is a type parameter.

8. True/False. Generic classes can only have one generic type parameter.
False

9. True/False. Generic type constraints limit what can be used for the generic type.
True

10. True/False. Constraints let you use the methods of the thing you are constraining to.
True