04 Generics

Test your Knowledge

1. Describe the problem generics address.

-- Use generic types to maximize code reuse, type safety, and performance.

--The most common use of generics is to create collection classes.

2. How would you create a list of strings, using the generic List class?

-- public class List<T> : System.Collections.Generic.ICollection<T>,

3. How many generic type parameters does the Dictionary class have?

-- Generic. Dictionary<TKey,TValue> generic type has two type parameters, TKey and TValue , that represent the types of its 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?

-- The Insert method of List<T> class inserts an object at a given position.

6. Name two methods that cause items to be removed from a List.

-- List<T>RemoveAll()

-- List<T>Remove()

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