Test your Knowledge

1. Describe the problem generics address.
   Allow us to design the class and methods but defer the specification of types until the class or methods is declared and called.
   Considerring that we will write method for any type, then if we don't have generics, then we have to write duplicated code block for each type, int, double or classes. But thanks to generics, we can only write one block to do so to avoid duplicated code. Another way to solve this issus is use object type. But it will have some unwanted boxing and unboxing, which will lower the performance.
2. How would you create a list of strings, using the generic List class?
   List<string> str = new List<string>().
3. How many generic type parameters does the Dictionary class have?
   Two, key and value.
4. True/False. When a generic class has multiple type parameters, they must all match.
   False.
5. What method is used to add items to a List object?
   listName.add(T item).
6. Name two methods that cause items to be removed from a List.
   listName.Remove(T item), listName.Clear(),listName.RemoveAt(int index)
7. How do you indicate that a class has a generic type parameter?
   void ClassName <T>
8. True/False. Generic classes can only have one generic type parameter.
   No. such as dictionary has two generic type parameters
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.