

1 C#

1.1 Generics

The type constraints for the first version of **GreaterCount**, it constraints the type **T** to be implementing the **IComparable** interface, ensuring that items of type **T** can be compared between themselves. The generic type **U** is not having any constraints applied to it, but it is neither used in this case.

Additionally, the **item** object type needs to be implementing **IEnumerable** with the generic type **T** provided.

The type constraints for the second version of **GreaterCount**, we achieve the same result as the above answer, but through transitivity where the constraints are that **T** is of same type of **U** and type **U** implements the **IComparable** type with type **U**. This is only accepted if the **IComparable** interface allows for implementations for the type **U**.

2 Software Engineering

2.1 Exercise 1

2.2 Exercise 2

2.3 Exercise 3

2.4 Exercise 4

2.5 Exercise 5

2.6 Exercise 6