Collections - Interview Questions

What is a collection in C#, and why do we use it instead of arrays?

What is the difference between a generic collection and a non-generic collection in .NET?

Explain the differences between ArrayList and List<T>.

What are the key differences between IEnumerable<T> and ICollection<T>?

How do List<T> and Dictionary<TKey, TValue> differ, and when would you use one over the other?

What is the difference between a Queue<T> and a Stack<T>? Provide real-life use cases for each.

How does LINQ integrate with collections? Can you provide an example of filtering and projecting data using LINQ?

What is a HashSet<T>, and how is it different from a List<T>?

What are the performance considerations when choosing between different types of collections (e.g., List, Dictionary, HashSet)?