**The following 4 standard LINQ query operators belong to Partitioning Operators category**  
Take  
Skip  
TakeWhile  
SkipWhile   
  
   
  
**Take**method returns a specified number of elements from the start of the collection. The number of items to return is specified using the count parameter this method expects.  
  
**Skip**method skips a specified number of elements in a collection and then returns the remaining elements. The number of items to skip is specified using the count parameter this method expects.   
  
**Please Note:** For the same argument value, the Skip method returns all of the items that the Take method would not return.  
  
**TakeWhile**method returns elements from a collection as long as the given condition specified by the predicate is true.   
  
**SkipWhile**method skips elements in a collection as long as the given condition specified by the predicate is true, and then returns the remaining elements.  
  
**Example 1:**Retrieves only the first 3 countries of the array.

string[] countries = { "Australia", "Canada", "Germany", "US", "India", "UK", "Italy" };

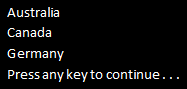
IEnumerable<string> result = countries.Take(3);

foreach (string country in result)

{

    Console.WriteLine(country);

}

**Output:**   
   
  
**Example 2:** Rewrite **Example 1**using SQL like syntax

string[] countries = { "Australia", "Canada", "Germany", "US", "India", "UK", "Italy" };

IEnumerable<string> result = (from country in countries

                                                   select country).Take(3);

foreach (string country in result)

{

    Console.WriteLine(country);

}

**Example 3:** Skips the first 3 countries and retrieves the rest of them

string[] countries = { "Australia", "Canada", "Germany", "US", "India", "UK", "Italy" };

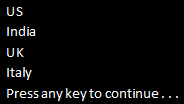
IEnumerable<string> result = countries.Skip(3);

foreach (string country in result)

{

    Console.WriteLine(country);

}

**Output:**   
   
  
**Example 4:** Return countries starting from the beginning of the array until a country name is hit that does not have length greater than 2 characters.

string[] countries = { "Australia", "Canada", "Germany", "US", "India", "UK", "Italy" };

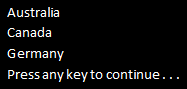
IEnumerable<string> result = countries.TakeWhile(s => s.Length > 2);

foreach (string country in result)

{

    Console.WriteLine(country);

}

**Output:**   
   
  
**Example 5:** Skip elements starting from the beginning of the array, until a country name is hit that does not have length greater than 2 characters, and then return the remaining elements.

string[] countries = { "Australia", "Canada", "Germany", "US", "India", "UK", "Italy" };

IEnumerable<string> result = countries.SkipWhile(s => s.Length > 2);

foreach (string country in result)

{

    Console.WriteLine(country);

}

**Output:**   
