using System;

using System.Collections;

namespace CollectionApplication

{

class Program

{

static void Main(string[] args)

{

ArrayList al = new ArrayList();

Console.WriteLine("Adding some numbers:");

al.Add(45);

al.Add(78);

al.Add(33);

al.Add(56);

al.Add(12);

al.Add(23);

al.Add(9);

Console.WriteLine("Capacity: {0} ", al.Capacity);

Console.WriteLine("Count: {0}", al.Count);

Console.Write("Content: ");

foreach (int i in al)

{

Console.Write(i + " ");

}

Console.WriteLine();

Console.Write("Sorted Content: ");

al.Sort();

foreach (int i in al)

{

Console.Write(i + " ");

}

Console.WriteLine();

Console.ReadKey();

}

}

}

Class Activity

Implement each of following properties and methods on ArrayList

|  |  |
| --- | --- |
| **Property** | **Description** |
| Capacity | Gets or sets the number of elements that the ArrayList can contain. |
| Count | Gets the number of elements actually contained in the ArrayList. |
| IsFixedSize | Gets a value indicating whether the ArrayList has a fixed size. |
| IsReadOnly | Gets a value indicating whether the ArrayList is read-only. |
| Item | Gets or sets the element at the specified index. |

|  |  |
| --- | --- |
| Sr.No. | Methods |
| 1 | public virtual int Add(object value);  Adds an object to the end of the ArrayList. |
| 2 | public virtual void AddRange(ICollection c);  Adds the elements of an ICollection to the end of the ArrayList. |
| 3 | public virtual void Clear();  Removes all elements from the ArrayList. |
| 4 | public virtual bool Contains(object item);  Determines whether an element is in the ArrayList. |
| 5 | public virtual ArrayList GetRange(int index, int count);  Returns an ArrayList which represents a subset of the elements in the source ArrayList. |
| 6 | public virtual int IndexOf(object);  Returns the zero-based index of the first occurrence of a value in the ArrayList or in a portion of it. |
| 7 | public virtual void Insert(int index, object value);  Inserts an element into the ArrayList at the specified index. |
| 8 | public virtual void InsertRange(int index, ICollection c);  Inserts the elements of a collection into the ArrayList at the specified index. |
| 9 | public virtual void Remove(object obj);  Removes the first occurrence of a specific object from the ArrayList. |
| 10 | public virtual void RemoveAt(int index);  Removes the element at the specified index of the ArrayList. |
| 11 | public virtual void RemoveRange(int index, int count);  Removes a range of elements from the ArrayList. |
| 12 | public virtual void Reverse();  Reverses the order of the elements in the ArrayList. |
| 13 | public virtual void SetRange(int index, ICollection c);  Copies the elements of a collection over a range of elements in the ArrayList. |
| 14 | public virtual void Sort();  Sorts the elements in the ArrayList. |
| 15 | public virtual void TrimToSize();  Sets the capacity to the actual number of elements in the ArrayList. |