1. **Riverse Arrays**

int[] a = new int[] { 1, 2, 3 };

int i, n;

n = a.Length;

for (i = 0; i < n; i++)

{

Console.WriteLine(a[i]);

}

Console.WriteLine("Reverse");

for (i = n - 1; i >= 0; i--)

{

Console.WriteLine(a[i]);

}

1. **Find Out the Duplicate No:**

int[] arr = new int[] {1,2,3,1,6,2};

int i, length, j;

length = arr.Length;

for (i = 0; i < length; i++)

{

for (j = i+1; j < length; j++)

{

if(arr[i]== arr[j])

{

Console.WriteLine("Duplicate No \t " + arr[i]);

}

}

}

1. **Unique No**

int[] arr = new int[] {1,2,3,1,6,2};

int i, length, count, j;

length = arr.Length;

for (i = 0; i < length; i++)

{

count = 0;

for (j = 0; j < length; j++)

{

if(i !=j)

{

if (arr[i] == arr[j])

{

count++;

}

}

}

if (count == 0)

Console.WriteLine("Unique No \t " + arr[i]);

}

1. **Find maximum and minimum element in an array.**

int[] arr = new int[] { 2,3,5,1,7,4 };

int i, length, largestNo,smallestNO;

largestNo = arr[0];

smallestNO = arr[0];

length = arr.Length;

for (i = 0; i < length; i++)

{

if (smallestNO > arr[i])

{

smallestNO = arr[i];

}

if (largestNo < arr[i])

{

largestNo = arr[i];

}

}

Console.WriteLine("Smallest No: "+ smallestNO);

Console.WriteLine("Largest No: "+ largestNo);

1. **Find odd and even integers in from arrays**

int[] arr = new int[] { 2,3,5,1,7,4 };

int i, length;

length = arr.Length;

for (i = 0; i < length; i++)

{

if (arr[i]%2==0)

{

//evenNOList.Add(arr[i]);

Console.WriteLine("Even No: \t" + arr[i]);

}

else

{

Console.WriteLine("Odd No: \t" + arr[i]);

}

}

1. **Sort elements of array in ascending order**

int[] arr = new int[] { 2,3,5,1,7,4 };

int i,j, length,temp;

length = arr.Length;

for (i = 0; i < length; i++)

{

for (j = i+1; j < length; j++)

{

if(arr[j]< arr[i])

{

temp = arr[i];

arr[i] = arr[j];

arr[j] = temp;

}

}

}

Console.Write("\nElements of array in sorted ascending order:\n");

for (i = 0; i < length; i++)

{

Console.Write("{0} ", arr[i]);

}

1. **Sort elements of the array in descending order**

int[] arr = new int[] { 2,3,5,1,7,4 };

int i,j, length,temp;

length = arr.Length;

for (i = 0; i < length; i++)

{

for (j = i+1; j < length; j++)

{

if(arr[i] < arr[j])

{

temp = arr[i];

arr[i] = arr[j];

arr[j] = temp;

}

}

}

Console.Write("\nElements of array in sorted descending order:\n");

for (i = 0; i < length; i++)

{

Console.Write("{0} ", arr[i]);

}

1. **insert New value in the array (sorted list )**

int[] arr = new int[10];

int i, j, length, insertedValue, indexPosition;

Console.WriteLine("Input the size of the array");

length = Convert.ToInt32(Console.ReadLine());

Console.WriteLine("Input {0} element of the array in ascending order.");

for ( i = 0; i < length; i++)

{

arr[i] = Convert.ToInt32(Console.ReadLine());

}

indexPosition = 0;

Console.WriteLine("Input the value to be inserted : ");

insertedValue = Convert.ToInt32(Console.ReadLine());

// insertedValue = 3;

Console.WriteLine("The exist array list is :\n ");

for (i = 0; i < length; i++)

{

Console.WriteLine("{0} ", arr[i]);

}

for (i = 0; i < length; i++)

{

if(insertedValue < arr[i])

{

indexPosition = i;

break;

}

}

for (i = length; i >= indexPosition; i--)

{

arr[i] = arr[i - 1];

}

arr[indexPosition] = insertedValue;

Console.WriteLine("\nElements of array in sorted descending order:\n");

for (i = 0; i <= length; i++)

{

Console.WriteLine("{0} ", arr[i]);

}

1. **find the second largest element in an array.**

int[] arr = new int[]{2,4,6,8,10};

//Array.Sort(arr);

//Console.WriteLine(arr[(arr.Length - 1) - 1]);

int i, j, length, largestLocation = 0, largestNO, largestNO2 = 0;

length = arr.Length;

largestNO = 0;

for (i = 0; i < length; i++)

{

if (largestNO < arr[i])

{

largestNO = arr[i];

largestLocation = i;

}

}

for (i = 0; i < length; i++)

{

if (i != largestLocation)

{

if (largestNO2 < arr[i])

{

largestNO2 = arr[i];

}

}

}

Console.WriteLine(largestNO2);

1. **How to print duplicate characters in a String using C#?**

string repeatedWord = "woooooooow";

int[] cal = new int[256];

for (int i = 0; i < repeatedWord.Length; i++)

cal[repeatedWord[i]]++;

for (int i = 0; i < 256; i++)

if (cal[i] > 1)

{

Console.WriteLine("Character " + (char)i);

Console.WriteLine("Occurrence = " + cal[i] + " times");

}