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Array Activity

CSCI 2311

1. Create an array that will hold 10 integer values.

Dim intarray(9) as Integer

1. Create and initialize an array that will hold four popular cities in Texas.

Dim intarray() as String = {Austin, Dallas, Fort Worth, Houston}

1. Print out the last value in a single-dimensional array.

Console.WriteLine(strArray(strArray.Length + 1))

1. Declare a two-dimensional array that has 3 columns and 4 rows.

Dim intarray(2,3) as Integer

1. Write a For…Next loop that will printout each value in the array from problem 4.

For intIndex = 0 To 2

For intIndex = 0 To 3

Console.WriteLine(intArray(intIndex))

Next

Next

1. Write the code that will sequentially search through the array *strFirstNames* and will print out the word "Found" if the name "Brian" is in the array.

For intIndex = 0 To strFirstNames.Length

If strFirstNames(intIndex) = “Brian” Then

Console.WriteLine("Found")

End If

Next

1. What is the difference between the .Length and .GetUpperBound methods?

.getLength = total length of the array (.getupperbound + 1)

.getUpperBound = value of the upperBound

1. What will the following code do?

For intRow = intCounts.GetUpperBound(0) To 0 Step -1

Console.WriteLine(intCounts(intRow))

Next

This will write the display the values of the array from the end to the front, starting with the value at the upper bound.

1. What is the difference between ReDim and ReDim Preserve?

ReDim Preserve: will not reinitialize the values of the array to 0, but changes the dimensions

ReDim: array value genocide, but keeps the name

1. What is wrong with the following code?

Dim intAverages(4) = {2.0, 3, 1.5}

Size of the array is implicit (and different in this case) when the values of the cells are declared

Use the following array for questions 11 – 15.

Dim strWeek() As String = {"Sun", "Mon", "Tue", "Wed", "Thu", "Fri", "Sat"}

1. Print out the weekdays (not weekends).

For intRow = 1 To (strWeek.Length)

Console.WriteLine(strWeek(intRow))

Next

1. Using an array method, print out how many days are in the week.

Console.WriteLine(strMonth.Length)

1. Print out every day of the week starting with Tuesday.

For intRow = 2 To (intCounts.Length + 3)

If intRow > 6 Then

Console.WriteLine(intCounts(intRow - 7))

Else

Console.WriteLine(intCounts(intRow)

End If

Next

1. Assuming a textbox (txtDayofWeek) is created, search the array for the day provided (e.g. “Sun”) and return the matching index.

For intRow = 0 To (strWeek.Length)

If txtDayofWeek = strWeek(intRow) Then

Console.WriteLine(intRow)

End If

1. Select a random day of the week.

Dim intRVal As New Integer

Dim rVal As New Random

intRVal = rVal.Next(0, 7)

Console.WriteLine(strWeek(intRVal))

Use the following array for questions 16 – 18.

Dim intTemperatures() As Integer = {100,86,77,74,77,90,99,99,32,101,56,67,77}

1. Write the code that will find the coldest temperature in the list.

Dim intTemp, intX As New Integer

intTemp = intTempratures(0)

For intX = 0 To (intTemperatures.Length)

If intTemperatures(intX) < intTemp Then

intTemp = intTemperatures(intX)

End If

Next

Console.WriteLine(intTemperatures(intTemp))

1. (OPTIONAL) Create an array that will store the frequency of each temperature. Populate the array with the correct data.
2. Sort the array in ascending order.

Dim intTemp, intX, intY As New Integer

For intX = 0 To (intTemperatures.Length)

For intY = intX To (intTemperatures.Length)

If intTemperatures(intX) < intTemperatures(intY) Then

intTemp = intTemperatures(intX)

intTemperatures(intX) = intTemperatures(intY)

intTemperatures(intY)= intTemp

End If

intTemperatures(intX)

Next

Console.WriteLine(intTemperatures(intX))

Next