1050 Programming Logic

Lab 08 - Arrays

Name: \_\_\_**Thomas Spencer**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

***Instructions:*** *Complete the following exercises. Push your code to github and share the URL to your repository by submitting it to Blackboard.*

* Fill in the blanks in the following statement (2 points):

Given the following code, output the 2nd element (not index 2) and the last element.

string[] names = { "Al Dente", "Anna Graham", "Earle Bird", "Ginger Rayle", "Iona Ford" };

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace ConsoleApp2

{

public class Program

{

static void Main(string[] args)

{

string[] names = { "Al Dente", "Anna Graham", "Earle Bird", "Ginger Rayle", "Iona Ford" };

Console.WriteLine("{0}\n{1}", names[1], names[4]);

}

}

}

**My Output**



* Create a 12-element array called months. Set each element to the name of each month.

For example months[0] = “January”. Use a **for loop** to display the number and name of each month. (4 points)

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace ConsoleApp2

{

public class Program

{

static void Main(string[] args)

{

string[] months = { "January", "February", "March", "April", "May", "June", "July", "August", "September", "October", "November", "December", };

for (int i = 0; i < 12; i++)

{

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

}

}

}

}

**My Output**



* Create a 4-element array to store the names of 4 seasons. Use a **foreach loop** to display the name of each season. (4 points)

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace ConsoleApp2

{

public class Program

{

static void Main(string[] args)

{

int index = 0;

string[] seasons = { "Spring", "Summer", "Fall", "Winter" };

foreach (string period in seasons)

{

Console.WriteLine("{1}", index, period);

index++;

}

}

}

}

**My Output**



* Create an array of integers with 1000 elements. Fill the array with random numbers. Use a **foreach loop** to print all integers in the array (4 points).

Random random = new Random();  
int randomNumber

randomNumber = random.Next(0, 100); // place this line in the loop

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace ConsoleApp2

{

public class Program

{

static void Main(string[] args)

{

Random random = new Random(); //random generator created

int randomNumber;

int[] generator = new int[100];

foreach (int number in generator)

{

randomNumber = random.Next(0, 100); // place this line in the loop

Console.WriteLine("{0}", randomNumber);

}

}

}

}

**My Output**



* Paste the following code into the main() method. Modify the code; so that it works (You’ll have to make 2 small modifications). It should output the value of each string in the array called names (2 points).

string[] names = { "Al Dente", "Anna Graham", "Earle Bird", "Ginger Rayle", "Iona Ford" };

int i = 0;

while (i < names.Length)

{

Console.WriteLine(names[0]);

}

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace ConsoleApp2

{

public class Program

{

static void Main(string[] args)

{

string[] names = { "Al Dente", "Anna Graham", "Earle Bird", "Ginger Rayle", "Iona Ford" };

int i = 0;

while (i < names.Length)

{

Console.WriteLine(names[i]);

i++;

}

}

}

}

**My Output**

