Passing / Returns Arrays with Methods

**PassElements.java**

//This program demonstrates passing individual array elements as arguments to a method

**public class PassElements**

**{**

**public static void main(String[] args)**

**{**

// create and array

**int[] numbers = {5, 10, 15, 20, 25, 30, 35, 40};**

// pass each element to the ShowValue method.

**for (int index = 0; index < numbers.length; index++)**

**showValue(numbers[index]);**

**}**

**public static void showValue(int n)**

**{**

**System.out.print(“n + “ “);**

**}**

**}**

**ReturnArray.java**

//this program demonstrates how a reference to an array can be returned from a method

**public class ReturnArray**

**{**

**public static void main(String[] args)**

**{**

**double[] values;**

// let values reference the array returned from the getArray method.

**values = getArray();**

// display the values in the array

**for (int index = 0; index < values.length; index++)  
 System.out.println(values[index])**

**}**

// the getArray method returns a reference to an array of doubles

**public static double[] getArray()**

**{**

**double[] array = {1.2, 2.3, 4.5, 6.7, 8.9};**

**return array;**

**}**

**}**

**PassArray.java**

// this program demonstrates passing an entire array as an argument to a method

**import java.util.Scanner;**

**public class PassArray**

**{**

**public static void main(String[] args)**

**{**

//create an array

**int[] numbers = new int[4];**

//pass the array to the getValues method so we can populate it

**getValues(numbers);**

**System.out.println(“Here are the numbers that you entered: “);**

//pass the array to the showArray method

**showArray(numbers);**

**}**

// the getValues method accepts an array as its argument. The user is asked to // enter in values that will be stored in the array.

**public static void getValues(int[] array)**

**{**

// create a Scanner object for keyboard input

**Scanner keyboard = new Scanner(System.in);**

**System.out.println(“Enter a series of “ + array.length + “ numbers.”);**

// read the values into the array

**for (int index = 0; index < array.length; index++)**

**{**

**System.out.print(“Number “ + (index + 1) + “: “);**

**array[index] = keyboard.nextInt();**

**}**

**}**

// the showArray method accepts an array as an argument and displays it

**public static void showArray(int[] array)**

**{**

// display the array elements.

**for (int index = 0; index < array.length; index++)**

**System.out.print(array[index] + “ “);**

**}**

**}**