public class CountLettersInArray {

/\*\* Main method \*/

public static void main(String args[]) {

// Declare and create an array

To the method createArray – no parameters

char[] chars = createArray();

Returns an array (the pointer to it)–

That was created in the method

…

}// end main

/\*\* Create an array of characters \*/

public static char[] createArray() {

// Declare an array of characters and create it

char[] chars = new char[100];

// Create lowercase letters randomly and assign

// them to the array

for (int i = 0; i < chars.length; i++)

chars[i] = RandomCharacter.getRandomLowerCaseLetter();

// Return the array

return chars;

}// end createArray

…

}// end class

public class CountLettersInArray {

/\*\* Main method \*/

public static void main(String args[]) {

// Display the array

System.out.println("The lowercase letters are:");

displayArray(chars);

To the method –

Parameters: the array chars

…

}// end main

Returns nothing.

Notice that there is not a return statement

/\*\* Display the array of characters \*/

public static void displayArray(char[] chars) {

// Display the characters in the array 20 on each line

for (int i = 0; i < chars.length; i++) {

if ((i + 1) % 20 == 0)

System.out.println(chars[i]);

else

System.out.print(chars[i] + " ");

}

}// end displayArray

…

}// end class

public class CountLettersInArray {

/\*\* Main method \*/

public static void main(String args[]) {

…

// Count the occurrences of each letter

int[] counts = countLetters(chars);

Returns an array

Sends the reference (the pointer) of an array

…

}// end main

/\*\* Count the occurrences of each letter \*/

public static int[] countLetters(char[] chars) {

// Declare and create an array of 26 int

int[] counts = new int[26];

// For each lowercase letter in the array, count it

for (int i = 0; i < chars.length; i++)

counts[chars[i] - 'a']++;

return counts;

}// end countLetters

…

}//end class

public class CountLettersInArray {

/\*\* Main method \*/

public static void main(String args[]) {

…

// Display counts

System.out.println();

System.out.println("The occurrences of each letter are:");

displayCounts(counts);

}// end main

Sends the reference (the pointer) to the method

…

Returns nothing

/\*\* Display counts \*/

public static void displayCounts(int[] counts) {

for (int i = 0; i < counts.length; i++) {

if ((i + 1) % 10 == 0)

System.out.println(counts[i] + " " + (char)(i + 'a'));

else

System.out.print(counts[i] + " " + (char)(i + 'a') + " ");

}

}// ends displayCounts

}// end class