```java
public class ArrayExample {

	private int[] numbArray;

	// 1. Constructs a default array of size 10
	public ArrayExample() {
		numbArray = new int[10];
		numbArray[0] = 1;
		numbArray[1] = 3;
		numbArray[2] = 7;
		numbArray[3] = 19;
		numbArray[4] = 15;
		numbArray[5] = 19;
		numbArray[6] = 7;
		numbArray[7] = 3;
		numbArray[8] = 19;
		numbArray[9] = 48;
	}

	// 2. Constructs an array of random numbers (0-24) array of size count
	public ArrayExample(int count) {

	}

	// 3. This method prints all of the elements of the array in list form
	public void display() {

	}

	// 4. This method prints all of the elements in reverse order

	public void displayReverse() {


	}

	// 5. This method calculates and returns the average of all of the elements
	// The average of the default array is 14.1

	public double average(){

	}



	// 6. This method returns the maximum value of all of the elements
	// The max of the default array is 48.
	public int findMax() {


	}

	// 7. This method returns the index number of the first instance of int lookFor
	// returns -1 if not in the list
	// ex. Using the default array findIndex(15) will return 4

	public int linearSearch(int lookFor) {


	}
```

```
	/**
	 * 8. This method will print the elements and the tally. The list with the
	 * default constructor will be
	 * Number Frequency
	 *           1      1
	 *           3      2
	 *           7      2
	 *           15     1
	 *           19     3
	 *     48     1
	 */

	public void tallyList(){

	}

	/**
	 * 9. This method will print a column of numbers in the original order,
	 * a column of numbers in reverse order, and the average of the two.
	 * default constructor will be
	 * LIST       REVERSE       AVERAGE
	*            1      48     24.5
	*            3      19     11.0
	*            3      19     11.0
	*            7      19     13.0
	*            7      15     11.0
	*            15     7      11.0
	*            19     7      13.0
	*            19     3      11.0
	*            19     3      11.0
	*            48     1      24.5
	 */

	public void listReverseAvg() {


	}

	}

	// 10. This method will sort the array in ascending order
	//
	public void sort() {

	}

// 11. Binary Search. This method returns the index number of the first instance of int lookFor
// returns -1 if not in the list.  The Array must be sorted to use the Binary search
// ex. Using the default array findIndex(15) will return 4
	public int binarySearch(int lookFor)

	{

// 12. Write a tester that will create a random array of size 50 and test all pof these methods
	//

	public static void main(String[] args) {
			}
```

```
}
```