**ByImplementingThreadClass.java**

package threadExamples;

/\*\*

\* @author Vidhya Gayathri Raja

\*

\*/

public class ByImplementingThreadClass extends Thread{

public void run(){

Thread currentThread = Thread.currentThread();

System.out.println(currentThread.getName() + " " + currentThread.isAlive());

System.out.println(currentThread.getId() + " " + currentThread.getPriority());

int[] array = Calculator.generateRandomArray(10000);

long start = System.currentTimeMillis();

Calculator.bubbleSort(array);

long end = System.currentTimeMillis();

System.out.println("Sorting completed in " + (end-start) + " millis");

}

public static void main(String[] args) {

// TODO Auto-generated method stub

}

}

**Calculator.java**

public class Calculator {

public static void bubbleSort(int array[]) {

int n = array.length;

int k;

for (int m = n; m >= 0; m--) {

for (int i = 0; i < n - 1; i++) {

k = i + 1; if (array[i] > array[k]) {

swapNumbers(i, k, array);

}

}

}

}

private static void swapNumbers(int i, int j, int[] array) {

int temp;

temp = array[i];

array[i] = array[j];

array[j] = temp;

}

public static int[] generateRandomArray(int howMany){

int[] array = new int[howMany];

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

array[i] = (int) (Math.random() \* 1000);

}

return array;

}

}

**Test.java**

package threadExamples;

public class Test {

public static void main(String[] args) {

Thread currentThread = Thread.currentThread();

System.out.println(currentThread.getName() + " " + currentThread.isAlive());

System.out.println(currentThread.getId() + " " + currentThread.getPriority());

System.out.println("Task 1");

System.out.println("Task 2");

ByImplementingThreadClass t1 = new ByImplementingThreadClass();

t1.start();

System.out.println("Task 4");

System.out.println("Task 5");

}

}

