using System;

using System.Threading;

namespace \_6

{

// 插入排序

public class InsertionSorter

{

public int[] list;

public void Sort()

{

for (int i = 1; i < list.Length; i++)

{

int t = list[i];

int j = i;

while ((j > 0) && (list[j - 1] > t))

{

list[j] = list[j - 1];

j--;

}

list[j] = t;

}

Console.Write("Insertion done.");

}

}

// 冒泡排序

public class BubbleSorter

{

public int[] list;

public void Sort()

{

int i, j, temp;

bool done = false;

j = 1;

while ((j < list.Length) && (!done))

{

done = true;

for (i = 0; i < list.Length - j; i++)

{

if (list[i] > list[i + 1])

{

done = false;

temp = list[i];

list[i] = list[i + 1];

list[i + 1] = temp;

}

}

j++;

}

Console.Write("Bubble done.");

}

}

class MainClass

{

static void Main(string[] args)

{

InsertionSorter Sorter1 = new InsertionSorter();

BubbleSorter Sorter2 = new BubbleSorter();

// 生成随机元素的数组

int iCount = 10000;

Random random = new Random();

Sorter1.list = new int[iCount];

Sorter2.list = new int[iCount];

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

{

Sorter1.list[i] = Sorter2.list[i] = random.Next();

}

Thread sortThread1 = new Thread(new ThreadStart(Sorter1.Sort));

Thread sortThread2 = new Thread(new ThreadStart(Sorter2.Sort));

sortThread1.Start();

sortThread2.Start();

Console.Read();

}

}

}

