**Client full Class.**

import java.io.File;

import java.io.FileNotFoundException;

import java.io.FileOutputStream;

import java.io.IOException;

import java.io.PrintWriter;

import java.util.Random;

import java.util.Scanner;

/\*\*

\* This class take a unsorted file of size 1 billion double, sort it and put

\* it to a new file as sorted in ascending order.

\* @author Richelin Metellus

\* @version 05/03/2017

\*/

public class SortingLargeDataClient {

static int staticVar = 0;

static long cummulativeTime = 0;

public static void main(String[] args) throws IOException {

String folderDir = "C:\\Users\\Rich\\Documents\\TempFiles\\" ; // root directory for where to put all files.

File[] fileArray;

File sortedFile = new File(folderDir + "sortedData.txt");

/\*\*

\* Max memory jvm will attempt to use.

\*/

long maxMemory = Runtime.getRuntime().maxMemory();

System.out.println("max memory " + maxMemory);

/\*\*

\* total memory currently in use by jvm.

\*/

System.out.println(" Total memmory(bytes) currently in used:"

+ Runtime.getRuntime().totalMemory());

/\*\*

\* free memory available for future use

\*/

long freeMemory = Runtime.getRuntime().freeMemory();

System.out.println("Free memory(bytes): " + freeMemory);

long totalNumberOfElement = 1000000000;

double blockSizeByte = freeMemory \* 70/100; // using only x amount of free memory per block/file

int numberOfBlock = (int) ((Double.BYTES \* totalNumberOfElement) / blockSizeByte); // number of file needed after dissection.

System.out.printf(" number of block/file: %s files, block/file size: %s bytes ", numberOfBlock, blockSizeByte);

// number of double value per block/file

int elementPerBlock = (int) ((totalNumberOfElement / numberOfBlock));

System.out.printf("elementPerBlock = %s \n\n ", elementPerBlock);

fileBuilder(folderDir,"data.txt", 1000000000);

File f = new File(folderDir + "data.txt");

Scanner scan = new Scanner(f);

System.out.println("the 1st 20 values of the unsorted text file");

for (int i = 0; i < 20; i++) {

System.out.print(i + ":");

if (scan.hasNextLine()) {

System.out.println(scan.nextLine());

}

}

fileArray = createSortedBlock(folderDir,f, totalNumberOfElement, numberOfBlock, elementPerBlock);

long sortedFileStartTime = System.currentTimeMillis();

nWayMerge(sortedFile,fileArray);

long sortedFileEnd = System.currentTimeMillis();

long sortedElapsedTime = sortedFileEnd -sortedFileStartTime;

System.out.printf("Runtime for writing sorted data set of size \t for N\t = %,10d values\t time \t= %,10d miliseconds \n", totalNumberOfElement, sortedElapsedTime);

System.out.println("The first 20 element of sorted data text file");

Scanner sortedFileScan = new Scanner(sortedFile);

for (int i = 0; i < 20; i++) {

System.out.print(i + ":");

if (sortedFileScan.hasNextDouble()) {

System.out.println(i+1 +":" + sortedFileScan.nextDouble());

}

}

System.out.printf("Final Total Time spent so far in sorting the file: \t sorting cummulative\ttime \t= %,10d milliseconds\n", cummulativeTime );

}

/\*\*

\*

\* @param folderDirective : directive where to put the file

\* @param fileName : name of file in form "fileName.ext" ext can be .txt or

\* whatever.

\* @param N : the number of double element that should be in the file.

\*/

public static void fileBuilder(String folderDirective, String fileName, int N) throws IOException {

try {

String filePath = folderDirective + fileName;

File f = new File(filePath);

if (f.createNewFile())

{

System.out.println("File has been created");

try {

FileOutputStream fos = new FileOutputStream(filePath, false); // false to write to file; true to append

PrintWriter pw = new PrintWriter(fos);

Random rand = new Random();

long startTime = System.currentTimeMillis();

for (int i = 0; i < N; i++) {

pw.println(rand.nextDouble());

}

pw.close();

long endTime = System.currentTimeMillis();

long elapsedTime = endTime - startTime;

System.out.printf("Runtime for writing data set of size for N \t = %,10d values\t time \t= %,10d miliseconds \n", N, elapsedTime);

}

catch (FileNotFoundException fnfe) {

System.out.printf("unable to find %s file\n", fileName);

}

}

else

{

System.out.println("File already exists");

}

} catch (IOException e)

{

System.out.println("Cannot create the new file");

e.printStackTrace();

}

}

/\*\*

\* This method will create a sorted file for however file specified by the

\* user. the number of file/chunks passed as args should be dynamically determined based on

\* the fraction free of memory memory and optimized block size (#elements).

\*

\* @param parentFile : the unsorted large document to sort

\* @param totalNumberOfElements : number of elements in the file to sort.

\* @param numberOfFile : the number of file chunk(a block) to dissect the

\* file into.

\* @param elementsPerBlock : the minimun size/ number of element a file

\* chunk can have.

\* @throws FileNotFoundException

\*/

public static File[] createSortedBlock(String folderDirective,File parentFile, long totalNumberOfElements, int numberOfFile, int elementsPerBlock) throws FileNotFoundException {

Scanner scanFile = new Scanner(parentFile);

double[] tempArray;

File[] tempFileList = new File[numberOfFile];

int maxElementPerBlock = (int) (elementsPerBlock + (totalNumberOfElements - (elementsPerBlock \* numberOfFile)));

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

{

int arraySize = (i < numberOfFile - 1) ? elementsPerBlock : maxElementPerBlock;

tempArray = new double[arraySize];

for (int j = 0; j < elementsPerBlock; j++)

{

if (scanFile.hasNextLine()) {

tempArray[j] = Double.parseDouble(scanFile.nextLine());

}

}

// System.out.println("\n\nprinting newly created temp array\n");

// for (int k = 0; k < 10; k++) {

// System.out.println(tempArray[k]);

// }

// loop ends so sort array and write to new file.

System.out.println("\n\nstarting to create file " + i);

tempFileList[i] = sortedBlkToFile(folderDirective,"temp",tempArray);

}

return tempFileList;

}

/\*\*

\*

\* @param folderDirective

\* @param fileN

\* @param unsortedArr an unsorted array that will be sorted and write to a

\* new file block

\* @return the sorted file.

\*/

public static File sortedBlkToFile(String folderDirective,String fileN, double[] unsortedArr) {

String fileName = fileN + staticVar++ + ".txt";

System.out.println("\tsorting file/block");

long quickStartTime = System.currentTimeMillis();

quickSortInPlace(unsortedArr, 0, unsortedArr.length - 1);

long quickEndTime = System.currentTimeMillis();

long quickElapsedTime = quickEndTime - quickStartTime;

cummulativeTime += quickElapsedTime;

System.out.printf("\tRuntime to sort block: %12s of SIZE \t = %,7d double numbers using quickSort\ttime \t= %,10d milliseconds\n", fileName, unsortedArr.length, quickElapsedTime);

System.out.printf("\tTotal Time spent so far in sorting the blocks: \t sorting cummulative\ttime \t= %,10d milliseconds\n", cummulativeTime );

File f = null;

try {

String filePath = folderDirective + fileName; // absolute path of the file;

f = new File(filePath);

if (f.createNewFile())

{

System.out.println("\tDestination File for block has been created");

try {

FileOutputStream fos = new FileOutputStream(filePath, false); // false to write to file; true to append

PrintWriter pw = new PrintWriter(fos);

System.out.println("\twriting sorted array to file\t\t" + fileName);

long wStartTime = System.currentTimeMillis();

for (int i = 0; i < unsortedArr.length; i++) { // unsorted array now become a sorted Array;

pw.println(unsortedArr[i]);

}

pw.close();

long wEndTime = System.currentTimeMillis();

long wElapsedTime = wEndTime - wStartTime;

System.out.printf("\tRuntime to send sorted array to file:%5s \t time \t= %,10d milliseconds\n",fileName,wElapsedTime);

}

catch (FileNotFoundException fnfe) {

System.out.printf("unable to find %s file\n", fileName);

}

}

else

{

System.out.println("File already exists");

}

}

catch (IOException e) {

System.out.println("Cannot create the new file");

}

return f;

}

public static void nWayMerge(File sortedMaster, File[] sortedChunks) throws FileNotFoundException

{

Scanner[] chunkScanner = new Scanner[sortedChunks.length]; // if 189 files, 189 scanners

Double buffer[] = new Double[chunkScanner.length]; // if 189 file, 189 Doubles values

FileOutputStream fos;

PrintWriter pw;

try

{

fos = new FileOutputStream(sortedMaster, false); // false to write to file; true to append

pw = new PrintWriter(fos);

}

catch(FileNotFoundException fnfe) {

System.out.printf("unable to find %s file\n", sortedMaster);

return; // if we can't open file so we don't have to do below steps.

}

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

chunkScanner[i] = new Scanner(sortedChunks[i]); // for whatever file, create an associate scanner.

if (chunkScanner[i].hasNextDouble()) {

buffer[i] = chunkScanner[i].nextDouble(); // populate the buffer to take the 1st element of each file. since by default they are null initially.

}

}

/\*------------ updating buffer for each minimun value. -------------- \*/

do {

int indexOfMin = -1; // index of minVal for which value to update the scanner at.

double minVal = 0;

// find min value in buffer and min index of that value.

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

if (buffer[i] != null && (indexOfMin == -1 || buffer[i] < minVal)) {

minVal = buffer[i];

indexOfMin = i;

}

}

// if no min found, picture all buffer cells as null. then should break. we're done.

if (indexOfMin == -1) {

break;

}

pw.println(buffer[indexOfMin]); // write min to sortedMaster file.

// update/replace the value of buffer at the index we find it.

if (chunkScanner[indexOfMin].hasNextDouble()) {

buffer[indexOfMin] = chunkScanner[indexOfMin].nextDouble();

} else {

buffer[indexOfMin] = null; // if we don't have a next value in file at buffer[i];

}

} while (true);

pw.close(); // done, close to save file.

}

/\*\*

\*

\* @param S

\* @param a start of the segment

\* @param b end of the segment

\*/

public static void quickSortInPlace(double[] S, int a, int b) // 1st call Qs(S,0,7) for an array of size 8.

{

if (a >= b) {

return; // subarray is trivially sorted. Base case

} // when we have only 1 element into the subarray. (a=0, b=0) or the segment is invalid

/\*start of partionning logic(where element lesser than the pivot on left of pivot

and element greater than the pivot on the right of pivot.

\*/

int left = a; // the index 1st element in subarray

int right = b - 1; // index element before pivot

double pivot = S[b]; // last element in orginal segment as pivot

double temp; // temp object for swapping

while (left <= right) {

// scan until reaching value equal or larger than pivot(or right marker)

while (left <= right && S[left] < pivot) //:- (85) > pivot(50) in comp result: -1 > 0..false do not incremnt left index position.

{

left++;

}

// scan until reaching value equal or smaller than pivot(or left marker)

while (left <= right && (S[right] > pivot)) // (96) > 50 comp: -1 < 0 true

{

right--;

}

if (left <= right) // indices did not strictly cross

{

// swap values and shring range

temp = S[left];

S[left] = S[right];

S[right] = temp;

left++;

right--;

}

}

//put pivot into its final place(currently marked by left index)

temp = S[left];

S[left] = S[b];

S[b] = temp;

//----- End of partitioning---

//make recursive calls

quickSortInPlace(S, a, left - 1);

quickSortInPlace(S, left + 1, b);

}

}

**OutPut**

run:

max memory 937951232

Total memmory(bytes) currently in used:64487424

Free memory(bytes): 63480640

number of block/file: 180 files, block/file size: 4.4436448E7 bytes elementPerBlock = 5555555

Runtime for writing data set of size for N = 1,000,000,000 values time = 785,676 miliseconds.

the 1st 20 values of the unsorted text file

0: 0.267698667772615

1: 0.5045723383035753

2: 0.024720309155795595

3: 0.42718316391654876

4: 0.08019385432690163

5: 0.5364982889462974

6: 0.6326477752116073

7: 0.542934944097396

8: 0.49836568383135726

9: 0.3322364922439095

10: 0.7431132942714498

11: 0.6486571996995882

12: 0.10957628885026405

13: 0.9412240922175298

14: 0.38941954813283775

15: 0.7202539205989363

16: 0.46865561582622195

17: 0.8763787589915568

18: 0.8021132586102533

19: 0.6449586335968107

starting to create file 0

sorting file/block

Runtime to sort block: temp0.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,034 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 1,034 milliseconds

Destination File for block has been created

writing sorted array to file temp0.txt

Runtime to send sorted array to file:temp0.txt time = 4,014 milliseconds

starting to create file 1

sorting file/block

Runtime to sort block: temp1.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,081 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 2,115 milliseconds

Destination File for block has been created

writing sorted array to file temp1.txt

Runtime to send sorted array to file:temp1.txt time = 4,208 milliseconds

starting to create file 2

sorting file/block

Runtime to sort block: temp2.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,134 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 3,249 milliseconds

Destination File for block has been created

writing sorted array to file temp2.txt

Runtime to send sorted array to file:temp2.txt time = 5,063 milliseconds

starting to create file 3

sorting file/block

Runtime to sort block: temp3.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,103 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 4,352 milliseconds

Destination File for block has been created

writing sorted array to file temp3.txt

Runtime to send sorted array to file:temp3.txt time = 3,424 milliseconds

starting to create file 4

sorting file/block

Runtime to sort block: temp4.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,103 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 5,455 milliseconds

Destination File for block has been created

writing sorted array to file temp4.txt

Runtime to send sorted array to file:temp4.txt time = 3,577 milliseconds

starting to create file 5

sorting file/block

Runtime to sort block: temp5.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,081 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 6,536 milliseconds

Destination File for block has been created

writing sorted array to file temp5.txt

Runtime to send sorted array to file:temp5.txt time = 4,262 milliseconds

starting to create file 6

sorting file/block

Runtime to sort block: temp6.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,050 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 7,586 milliseconds

Destination File for block has been created

writing sorted array to file temp6.txt

Runtime to send sorted array to file:temp6.txt time = 3,669 milliseconds

starting to create file 7

sorting file/block

Runtime to sort block: temp7.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,079 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 8,665 milliseconds

Destination File for block has been created

writing sorted array to file temp7.txt

Runtime to send sorted array to file:temp7.txt time = 3,950 milliseconds

starting to create file 8

sorting file/block

Runtime to sort block: temp8.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,203 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 9,868 milliseconds

Destination File for block has been created

writing sorted array to file temp8.txt

Runtime to send sorted array to file:temp8.txt time = 5,528 milliseconds

starting to create file 9

sorting file/block

Runtime to sort block: temp9.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,050 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 10,918 milliseconds

Destination File for block has been created

writing sorted array to file temp9.txt

Runtime to send sorted array to file:temp9.txt time = 14,994 milliseconds

starting to create file 10

sorting file/block

Runtime to sort block: temp10.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,103 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 12,021 milliseconds

Destination File for block has been created

writing sorted array to file temp10.txt

Runtime to send sorted array to file:temp10.txt time = 3,339 milliseconds

starting to create file 11

sorting file/block

Runtime to sort block: temp11.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,063 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 13,084 milliseconds

Destination File for block has been created

writing sorted array to file temp11.txt

Runtime to send sorted array to file:temp11.txt time = 4,203 milliseconds

starting to create file 12

sorting file/block

Runtime to sort block: temp12.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,202 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 14,286 milliseconds

Destination File for block has been created

writing sorted array to file temp12.txt

Runtime to send sorted array to file:temp12.txt time = 3,386 milliseconds

starting to create file 13

sorting file/block

Runtime to sort block: temp13.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,137 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 15,423 milliseconds

Destination File for block has been created

writing sorted array to file temp13.txt

Runtime to send sorted array to file:temp13.txt time = 5,058 milliseconds

starting to create file 14

sorting file/block

Runtime to sort block: temp14.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,134 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 16,557 milliseconds

Destination File for block has been created

writing sorted array to file temp14.txt

Runtime to send sorted array to file:temp14.txt time = 4,165 milliseconds

starting to create file 15

sorting file/block

Runtime to sort block: temp15.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,103 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 17,660 milliseconds

Destination File for block has been created

writing sorted array to file temp15.txt

Runtime to send sorted array to file:temp15.txt time = 5,580 milliseconds

starting to create file 16

sorting file/block

Runtime to sort block: temp16.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,165 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 18,825 milliseconds

Destination File for block has been created

writing sorted array to file temp16.txt

Runtime to send sorted array to file:temp16.txt time = 4,452 milliseconds

starting to create file 17

sorting file/block

Runtime to sort block: temp17.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,085 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 19,910 milliseconds

Destination File for block has been created

writing sorted array to file temp17.txt

Runtime to send sorted array to file:temp17.txt time = 4,552 milliseconds

starting to create file 18

sorting file/block

Runtime to sort block: temp18.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,108 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 21,018 milliseconds

Destination File for block has been created

writing sorted array to file temp18.txt

Runtime to send sorted array to file:temp18.txt time = 3,782 milliseconds

starting to create file 19

sorting file/block

Runtime to sort block: temp19.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,071 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 22,089 milliseconds

Destination File for block has been created

writing sorted array to file temp19.txt

Runtime to send sorted array to file:temp19.txt time = 5,241 milliseconds

starting to create file 20

sorting file/block

Runtime to sort block: temp20.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,087 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 23,176 milliseconds

Destination File for block has been created

writing sorted array to file temp20.txt

Runtime to send sorted array to file:temp20.txt time = 4,063 milliseconds

starting to create file 21

sorting file/block

Runtime to sort block: temp21.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,087 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 24,263 milliseconds

Destination File for block has been created

writing sorted array to file temp21.txt

Runtime to send sorted array to file:temp21.txt time = 3,641 milliseconds

starting to create file 22

sorting file/block

Runtime to sort block: temp22.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,066 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 25,329 milliseconds

Destination File for block has been created

writing sorted array to file temp22.txt

Runtime to send sorted array to file:temp22.txt time = 3,238 milliseconds

starting to create file 23

sorting file/block

Runtime to sort block: temp23.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,049 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 26,378 milliseconds

Destination File for block has been created

writing sorted array to file temp23.txt

Runtime to send sorted array to file:temp23.txt time = 4,595 milliseconds

starting to create file 24

sorting file/block

Runtime to sort block: temp24.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,055 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 27,433 milliseconds

Destination File for block has been created

writing sorted array to file temp24.txt

Runtime to send sorted array to file:temp24.txt time = 3,921 milliseconds

starting to create file 25

sorting file/block

Runtime to sort block: temp25.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,094 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 28,527 milliseconds

Destination File for block has been created

writing sorted array to file temp25.txt

Runtime to send sorted array to file:temp25.txt time = 3,738 milliseconds

starting to create file 26

sorting file/block

Runtime to sort block: temp26.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,119 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 29,646 milliseconds

Destination File for block has been created

writing sorted array to file temp26.txt

Runtime to send sorted array to file:temp26.txt time = 3,565 milliseconds

starting to create file 27

sorting file/block

Runtime to sort block: temp27.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,065 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 30,711 milliseconds

Destination File for block has been created

writing sorted array to file temp27.txt

Runtime to send sorted array to file:temp27.txt time = 4,115 milliseconds

starting to create file 28

sorting file/block

Runtime to sort block: temp28.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,132 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 31,843 milliseconds

Destination File for block has been created

writing sorted array to file temp28.txt

Runtime to send sorted array to file:temp28.txt time = 3,555 milliseconds

starting to create file 29

sorting file/block

Runtime to sort block: temp29.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,103 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 32,946 milliseconds

Destination File for block has been created

writing sorted array to file temp29.txt

Runtime to send sorted array to file:temp29.txt time = 3,103 milliseconds

starting to create file 30

sorting file/block

Runtime to sort block: temp30.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,093 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 34,039 milliseconds

Destination File for block has been created

writing sorted array to file temp30.txt

Runtime to send sorted array to file:temp30.txt time = 3,922 milliseconds

starting to create file 31

sorting file/block

Runtime to sort block: temp31.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,064 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 35,103 milliseconds

Destination File for block has been created

writing sorted array to file temp31.txt

Runtime to send sorted array to file:temp31.txt time = 3,933 milliseconds

starting to create file 32

sorting file/block

Runtime to sort block: temp32.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,049 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 36,152 milliseconds

Destination File for block has been created

writing sorted array to file temp32.txt

Runtime to send sorted array to file:temp32.txt time = 3,393 milliseconds

starting to create file 33

sorting file/block

Runtime to sort block: temp33.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,087 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 37,239 milliseconds

Destination File for block has been created

writing sorted array to file temp33.txt

Runtime to send sorted array to file:temp33.txt time = 3,406 milliseconds

starting to create file 34

sorting file/block

Runtime to sort block: temp34.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,087 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 38,326 milliseconds

Destination File for block has been created

writing sorted array to file temp34.txt

Runtime to send sorted array to file:temp34.txt time = 3,123 milliseconds

starting to create file 35

sorting file/block

Runtime to sort block: temp35.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,060 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 39,386 milliseconds

Destination File for block has been created

writing sorted array to file temp35.txt

Runtime to send sorted array to file:temp35.txt time = 3,051 milliseconds

starting to create file 36

sorting file/block

Runtime to sort block: temp36.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,065 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 40,451 milliseconds

Destination File for block has been created

writing sorted array to file temp36.txt

Runtime to send sorted array to file:temp36.txt time = 3,342 milliseconds

starting to create file 37

sorting file/block

Runtime to sort block: temp37.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,041 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 41,492 milliseconds

Destination File for block has been created

writing sorted array to file temp37.txt

Runtime to send sorted array to file:temp37.txt time = 3,442 milliseconds

starting to create file 38

sorting file/block

Runtime to sort block: temp38.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,072 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 42,564 milliseconds

Destination File for block has been created

writing sorted array to file temp38.txt

Runtime to send sorted array to file:temp38.txt time = 3,288 milliseconds

starting to create file 39

sorting file/block

Runtime to sort block: temp39.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,087 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 43,651 milliseconds

Destination File for block has been created

writing sorted array to file temp39.txt

Runtime to send sorted array to file:temp39.txt time = 3,324 milliseconds

starting to create file 40

sorting file/block

Runtime to sort block: temp40.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,065 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 44,716 milliseconds

Destination File for block has been created

writing sorted array to file temp40.txt

Runtime to send sorted array to file:temp40.txt time = 3,744 milliseconds

starting to create file 41

sorting file/block

Runtime to sort block: temp41.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,087 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 45,803 milliseconds

Destination File for block has been created

writing sorted array to file temp41.txt

Runtime to send sorted array to file:temp41.txt time = 3,423 milliseconds

starting to create file 42

sorting file/block

Runtime to sort block: temp42.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,066 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 46,869 milliseconds

Destination File for block has been created

writing sorted array to file temp42.txt

Runtime to send sorted array to file:temp42.txt time = 3,293 milliseconds

starting to create file 43

sorting file/block

Runtime to sort block: temp43.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,072 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 47,941 milliseconds

Destination File for block has been created

writing sorted array to file temp43.txt

Runtime to send sorted array to file:temp43.txt time = 3,734 milliseconds

starting to create file 44

sorting file/block

Runtime to sort block: temp44.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,103 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 49,044 milliseconds

Destination File for block has been created

writing sorted array to file temp44.txt

Runtime to send sorted array to file:temp44.txt time = 3,452 milliseconds

starting to create file 45

sorting file/block

Runtime to sort block: temp45.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,072 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 50,116 milliseconds

Destination File for block has been created

writing sorted array to file temp45.txt

Runtime to send sorted array to file:temp45.txt time = 3,608 milliseconds

starting to create file 46

sorting file/block

Runtime to sort block: temp46.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,099 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 51,215 milliseconds

Destination File for block has been created

writing sorted array to file temp46.txt

Runtime to send sorted array to file:temp46.txt time = 3,209 milliseconds

starting to create file 47

sorting file/block

Runtime to sort block: temp47.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,087 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 52,302 milliseconds

Destination File for block has been created

writing sorted array to file temp47.txt

Runtime to send sorted array to file:temp47.txt time = 3,306 milliseconds

starting to create file 48

sorting file/block

Runtime to sort block: temp48.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,087 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 53,389 milliseconds

Destination File for block has been created

writing sorted array to file temp48.txt

Runtime to send sorted array to file:temp48.txt time = 3,239 milliseconds

starting to create file 49

sorting file/block

Runtime to sort block: temp49.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,087 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 54,476 milliseconds

Destination File for block has been created

writing sorted array to file temp49.txt

Runtime to send sorted array to file:temp49.txt time = 3,508 milliseconds

starting to create file 50

sorting file/block

Runtime to sort block: temp50.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,072 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 55,548 milliseconds

Destination File for block has been created

writing sorted array to file temp50.txt

Runtime to send sorted array to file:temp50.txt time = 3,006 milliseconds

starting to create file 51

sorting file/block

Runtime to sort block: temp51.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,034 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 56,582 milliseconds

Destination File for block has been created

writing sorted array to file temp51.txt

Runtime to send sorted array to file:temp51.txt time = 3,459 milliseconds

starting to create file 52

sorting file/block

Runtime to sort block: temp52.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,075 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 57,657 milliseconds

Destination File for block has been created

writing sorted array to file temp52.txt

Runtime to send sorted array to file:temp52.txt time = 3,841 milliseconds

starting to create file 53

sorting file/block

Runtime to sort block: temp53.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,103 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 58,760 milliseconds

Destination File for block has been created

writing sorted array to file temp53.txt

Runtime to send sorted array to file:temp53.txt time = 3,707 milliseconds

starting to create file 54

sorting file/block

Runtime to sort block: temp54.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,022 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 59,782 milliseconds

Destination File for block has been created

writing sorted array to file temp54.txt

Runtime to send sorted array to file:temp54.txt time = 3,688 milliseconds

starting to create file 55

sorting file/block

Runtime to sort block: temp55.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,117 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 60,899 milliseconds

Destination File for block has been created

writing sorted array to file temp55.txt

Runtime to send sorted array to file:temp55.txt time = 3,828 milliseconds

starting to create file 56

sorting file/block

Runtime to sort block: temp56.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,070 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 61,969 milliseconds

Destination File for block has been created

writing sorted array to file temp56.txt

Runtime to send sorted array to file:temp56.txt time = 3,324 milliseconds

starting to create file 57

sorting file/block

Runtime to sort block: temp57.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,069 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 63,038 milliseconds

Destination File for block has been created

writing sorted array to file temp57.txt

Runtime to send sorted array to file:temp57.txt time = 3,813 milliseconds

starting to create file 58

sorting file/block

Runtime to sort block: temp58.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,039 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 64,077 milliseconds

Destination File for block has been created

writing sorted array to file temp58.txt

Runtime to send sorted array to file:temp58.txt time = 3,416 milliseconds

starting to create file 59

sorting file/block

Runtime to sort block: temp59.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,056 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 65,133 milliseconds

Destination File for block has been created

writing sorted array to file temp59.txt

Runtime to send sorted array to file:temp59.txt time = 3,237 milliseconds

starting to create file 60

sorting file/block

Runtime to sort block: temp60.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,089 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 66,222 milliseconds

Destination File for block has been created

writing sorted array to file temp60.txt

Runtime to send sorted array to file:temp60.txt time = 3,400 milliseconds

starting to create file 61

sorting file/block

Runtime to sort block: temp61.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,106 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 67,328 milliseconds

Destination File for block has been created

writing sorted array to file temp61.txt

Runtime to send sorted array to file:temp61.txt time = 3,192 milliseconds

starting to create file 62

sorting file/block

Runtime to sort block: temp62.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,048 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 68,376 milliseconds

Destination File for block has been created

writing sorted array to file temp62.txt

Runtime to send sorted array to file:temp62.txt time = 3,039 milliseconds

starting to create file 63

sorting file/block

Runtime to sort block: temp63.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,071 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 69,447 milliseconds

Destination File for block has been created

writing sorted array to file temp63.txt

Runtime to send sorted array to file:temp63.txt time = 3,041 milliseconds

starting to create file 64

sorting file/block

Runtime to sort block: temp64.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,025 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 70,472 milliseconds

Destination File for block has been created

writing sorted array to file temp64.txt

Runtime to send sorted array to file:temp64.txt time = 3,077 milliseconds

starting to create file 65

sorting file/block

Runtime to sort block: temp65.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,018 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 71,490 milliseconds

Destination File for block has been created

writing sorted array to file temp65.txt

Runtime to send sorted array to file:temp65.txt time = 3,095 milliseconds

starting to create file 66

sorting file/block

Runtime to sort block: temp66.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,052 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 72,542 milliseconds

Destination File for block has been created

writing sorted array to file temp66.txt

Runtime to send sorted array to file:temp66.txt time = 2,896 milliseconds

starting to create file 67

sorting file/block

Runtime to sort block: temp67.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,046 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 73,588 milliseconds

Destination File for block has been created

writing sorted array to file temp67.txt

Runtime to send sorted array to file:temp67.txt time = 2,876 milliseconds

starting to create file 68

sorting file/block

Runtime to sort block: temp68.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,071 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 74,659 milliseconds

Destination File for block has been created

writing sorted array to file temp68.txt

Runtime to send sorted array to file:temp68.txt time = 2,985 milliseconds

starting to create file 69

sorting file/block

Runtime to sort block: temp69.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,038 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 75,697 milliseconds

Destination File for block has been created

writing sorted array to file temp69.txt

Runtime to send sorted array to file:temp69.txt time = 2,928 milliseconds

starting to create file 70

sorting file/block

Runtime to sort block: temp70.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,105 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 76,802 milliseconds

Destination File for block has been created

writing sorted array to file temp70.txt

Runtime to send sorted array to file:temp70.txt time = 3,252 milliseconds

starting to create file 71

sorting file/block

Runtime to sort block: temp71.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,084 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 77,886 milliseconds

Destination File for block has been created

writing sorted array to file temp71.txt

Runtime to send sorted array to file:temp71.txt time = 3,752 milliseconds

starting to create file 72

sorting file/block

Runtime to sort block: temp72.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,061 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 78,947 milliseconds

Destination File for block has been created

writing sorted array to file temp72.txt

Runtime to send sorted array to file:temp72.txt time = 3,208 milliseconds

starting to create file 73

sorting file/block

Runtime to sort block: temp73.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,061 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 80,008 milliseconds

Destination File for block has been created

writing sorted array to file temp73.txt

Runtime to send sorted array to file:temp73.txt time = 3,171 milliseconds

starting to create file 74

sorting file/block

Runtime to sort block: temp74.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,060 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 81,068 milliseconds

Destination File for block has been created

writing sorted array to file temp74.txt

Runtime to send sorted array to file:temp74.txt time = 3,511 milliseconds

starting to create file 75

sorting file/block

Runtime to sort block: temp75.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,103 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 82,171 milliseconds

Destination File for block has been created

writing sorted array to file temp75.txt

Runtime to send sorted array to file:temp75.txt time = 3,852 milliseconds

starting to create file 76

sorting file/block

Runtime to sort block: temp76.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,139 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 83,310 milliseconds

Destination File for block has been created

writing sorted array to file temp76.txt

Runtime to send sorted array to file:temp76.txt time = 3,614 milliseconds

starting to create file 77

sorting file/block

Runtime to sort block: temp77.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,160 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 84,470 milliseconds

Destination File for block has been created

writing sorted array to file temp77.txt

Runtime to send sorted array to file:temp77.txt time = 3,493 milliseconds

starting to create file 78

sorting file/block

Runtime to sort block: temp78.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,131 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 85,601 milliseconds

Destination File for block has been created

writing sorted array to file temp78.txt

Runtime to send sorted array to file:temp78.txt time = 3,555 milliseconds

starting to create file 79

sorting file/block

Runtime to sort block: temp79.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,118 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 86,719 milliseconds

Destination File for block has been created

writing sorted array to file temp79.txt

Runtime to send sorted array to file:temp79.txt time = 3,646 milliseconds

starting to create file 80

sorting file/block

Runtime to sort block: temp80.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,123 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 87,842 milliseconds

Destination File for block has been created

writing sorted array to file temp80.txt

Runtime to send sorted array to file:temp80.txt time = 3,478 milliseconds

starting to create file 81

sorting file/block

Runtime to sort block: temp81.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,112 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 88,954 milliseconds

Destination File for block has been created

writing sorted array to file temp81.txt

Runtime to send sorted array to file:temp81.txt time = 3,319 milliseconds

starting to create file 82

sorting file/block

Runtime to sort block: temp82.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,110 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 90,064 milliseconds

Destination File for block has been created

writing sorted array to file temp82.txt

Runtime to send sorted array to file:temp82.txt time = 3,628 milliseconds

starting to create file 83

sorting file/block

Runtime to sort block: temp83.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,120 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 91,184 milliseconds

Destination File for block has been created

writing sorted array to file temp83.txt

Runtime to send sorted array to file:temp83.txt time = 3,340 milliseconds

starting to create file 84

sorting file/block

Runtime to sort block: temp84.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,123 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 92,307 milliseconds

Destination File for block has been created

writing sorted array to file temp84.txt

Runtime to send sorted array to file:temp84.txt time = 3,928 milliseconds

starting to create file 85

sorting file/block

Runtime to sort block: temp85.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,146 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 93,453 milliseconds

Destination File for block has been created

writing sorted array to file temp85.txt

Runtime to send sorted array to file:temp85.txt time = 4,150 milliseconds

starting to create file 86

sorting file/block

Runtime to sort block: temp86.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,165 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 94,618 milliseconds

Destination File for block has been created

writing sorted array to file temp86.txt

Runtime to send sorted array to file:temp86.txt time = 3,275 milliseconds

starting to create file 87

sorting file/block

Runtime to sort block: temp87.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,109 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 95,727 milliseconds

Destination File for block has been created

writing sorted array to file temp87.txt

Runtime to send sorted array to file:temp87.txt time = 3,471 milliseconds

starting to create file 88

sorting file/block

Runtime to sort block: temp88.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,144 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 96,871 milliseconds

Destination File for block has been created

writing sorted array to file temp88.txt

Runtime to send sorted array to file:temp88.txt time = 3,498 milliseconds

starting to create file 89

sorting file/block

Runtime to sort block: temp89.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,092 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 97,963 milliseconds

Destination File for block has been created

writing sorted array to file temp89.txt

Runtime to send sorted array to file:temp89.txt time = 3,397 milliseconds

starting to create file 90

sorting file/block

Runtime to sort block: temp90.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,135 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 99,098 milliseconds

Destination File for block has been created

writing sorted array to file temp90.txt

Runtime to send sorted array to file:temp90.txt time = 3,349 milliseconds

starting to create file 91

sorting file/block

Runtime to sort block: temp91.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,101 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 100,199 milliseconds

Destination File for block has been created

writing sorted array to file temp91.txt

Runtime to send sorted array to file:temp91.txt time = 3,334 milliseconds

starting to create file 92

sorting file/block

Runtime to sort block: temp92.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,116 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 101,315 milliseconds

Destination File for block has been created

writing sorted array to file temp92.txt

Runtime to send sorted array to file:temp92.txt time = 3,226 milliseconds

starting to create file 93

sorting file/block

Runtime to sort block: temp93.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,148 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 102,463 milliseconds

Destination File for block has been created

writing sorted array to file temp93.txt

Runtime to send sorted array to file:temp93.txt time = 3,471 milliseconds

starting to create file 94

sorting file/block

Runtime to sort block: temp94.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,141 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 103,604 milliseconds

Destination File for block has been created

writing sorted array to file temp94.txt

Runtime to send sorted array to file:temp94.txt time = 3,604 milliseconds

starting to create file 95

sorting file/block

Runtime to sort block: temp95.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,098 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 104,702 milliseconds

Destination File for block has been created

writing sorted array to file temp95.txt

Runtime to send sorted array to file:temp95.txt time = 3,684 milliseconds

starting to create file 96

sorting file/block

Runtime to sort block: temp96.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,048 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 105,750 milliseconds

Destination File for block has been created

writing sorted array to file temp96.txt

Runtime to send sorted array to file:temp96.txt time = 3,680 milliseconds

starting to create file 97

sorting file/block

Runtime to sort block: temp97.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,112 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 106,862 milliseconds

Destination File for block has been created

writing sorted array to file temp97.txt

Runtime to send sorted array to file:temp97.txt time = 3,235 milliseconds

starting to create file 98

sorting file/block

Runtime to sort block: temp98.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,117 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 107,979 milliseconds

Destination File for block has been created

writing sorted array to file temp98.txt

Runtime to send sorted array to file:temp98.txt time = 5,399 milliseconds

starting to create file 99

sorting file/block

Runtime to sort block: temp99.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,071 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 109,050 milliseconds

Destination File for block has been created

writing sorted array to file temp99.txt

Runtime to send sorted array to file:temp99.txt time = 3,723 milliseconds

starting to create file 100

sorting file/block

Runtime to sort block: temp100.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,104 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 110,154 milliseconds

Destination File for block has been created

writing sorted array to file temp100.txt

Runtime to send sorted array to file:temp100.txt time = 4,298 milliseconds

starting to create file 101

sorting file/block

Runtime to sort block: temp101.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,072 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 111,226 milliseconds

Destination File for block has been created

writing sorted array to file temp101.txt

Runtime to send sorted array to file:temp101.txt time = 3,809 milliseconds

starting to create file 102

sorting file/block

Runtime to sort block: temp102.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,123 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 112,349 milliseconds

Destination File for block has been created

writing sorted array to file temp102.txt

Runtime to send sorted array to file:temp102.txt time = 4,181 milliseconds

starting to create file 103

sorting file/block

Runtime to sort block: temp103.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,077 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 113,426 milliseconds

Destination File for block has been created

writing sorted array to file temp103.txt

Runtime to send sorted array to file:temp103.txt time = 3,639 milliseconds

starting to create file 104

sorting file/block

Runtime to sort block: temp104.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,101 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 114,527 milliseconds

Destination File for block has been created

writing sorted array to file temp104.txt

Runtime to send sorted array to file:temp104.txt time = 3,394 milliseconds

starting to create file 105

sorting file/block

Runtime to sort block: temp105.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,095 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 115,622 milliseconds

Destination File for block has been created

writing sorted array to file temp105.txt

Runtime to send sorted array to file:temp105.txt time = 3,561 milliseconds

starting to create file 106

sorting file/block

Runtime to sort block: temp106.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,106 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 116,728 milliseconds

Destination File for block has been created

writing sorted array to file temp106.txt

Runtime to send sorted array to file:temp106.txt time = 3,484 milliseconds

starting to create file 107

sorting file/block

Runtime to sort block: temp107.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,102 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 117,830 milliseconds

Destination File for block has been created

writing sorted array to file temp107.txt

Runtime to send sorted array to file:temp107.txt time = 3,723 milliseconds

starting to create file 108

sorting file/block

Runtime to sort block: temp108.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,072 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 118,902 milliseconds

Destination File for block has been created

writing sorted array to file temp108.txt

Runtime to send sorted array to file:temp108.txt time = 3,275 milliseconds

starting to create file 109

sorting file/block

Runtime to sort block: temp109.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,115 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 120,017 milliseconds

Destination File for block has been created

writing sorted array to file temp109.txt

Runtime to send sorted array to file:temp109.txt time = 3,772 milliseconds

starting to create file 110

sorting file/block

Runtime to sort block: temp110.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,118 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 121,135 milliseconds

Destination File for block has been created

writing sorted array to file temp110.txt

Runtime to send sorted array to file:temp110.txt time = 4,756 milliseconds

starting to create file 111

sorting file/block

Runtime to sort block: temp111.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,065 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 122,200 milliseconds

Destination File for block has been created

writing sorted array to file temp111.txt

Runtime to send sorted array to file:temp111.txt time = 4,199 milliseconds

starting to create file 112

sorting file/block

Runtime to sort block: temp112.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,077 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 123,277 milliseconds

Destination File for block has been created

writing sorted array to file temp112.txt

Runtime to send sorted array to file:temp112.txt time = 11,512 milliseconds

starting to create file 113

sorting file/block

Runtime to sort block: temp113.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,089 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 124,366 milliseconds

Destination File for block has been created

writing sorted array to file temp113.txt

Runtime to send sorted array to file:temp113.txt time = 3,721 milliseconds

starting to create file 114

sorting file/block

Runtime to sort block: temp114.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,092 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 125,458 milliseconds

Destination File for block has been created

writing sorted array to file temp114.txt

Runtime to send sorted array to file:temp114.txt time = 4,170 milliseconds

starting to create file 115

sorting file/block

Runtime to sort block: temp115.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,118 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 126,576 milliseconds

Destination File for block has been created

writing sorted array to file temp115.txt

Runtime to send sorted array to file:temp115.txt time = 6,515 milliseconds

starting to create file 116

sorting file/block

Runtime to sort block: temp116.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,150 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 127,726 milliseconds

Destination File for block has been created

writing sorted array to file temp116.txt

Runtime to send sorted array to file:temp116.txt time = 4,554 milliseconds

starting to create file 117

sorting file/block

Runtime to sort block: temp117.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,062 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 128,788 milliseconds

Destination File for block has been created

writing sorted array to file temp117.txt

Runtime to send sorted array to file:temp117.txt time = 3,844 milliseconds

starting to create file 118

sorting file/block

Runtime to sort block: temp118.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,056 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 129,844 milliseconds

Destination File for block has been created

writing sorted array to file temp118.txt

Runtime to send sorted array to file:temp118.txt time = 3,738 milliseconds

starting to create file 119

sorting file/block

Runtime to sort block: temp119.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,236 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 131,080 milliseconds

Destination File for block has been created

writing sorted array to file temp119.txt

Runtime to send sorted array to file:temp119.txt time = 4,832 milliseconds

starting to create file 120

sorting file/block

Runtime to sort block: temp120.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,123 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 132,203 milliseconds

Destination File for block has been created

writing sorted array to file temp120.txt

Runtime to send sorted array to file:temp120.txt time = 4,091 milliseconds

starting to create file 121

sorting file/block

Runtime to sort block: temp121.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,173 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 133,376 milliseconds

Destination File for block has been created

writing sorted array to file temp121.txt

Runtime to send sorted array to file:temp121.txt time = 4,309 milliseconds

starting to create file 122

sorting file/block

Runtime to sort block: temp122.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,110 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 134,486 milliseconds

Destination File for block has been created

writing sorted array to file temp122.txt

Runtime to send sorted array to file:temp122.txt time = 3,616 milliseconds

starting to create file 123

sorting file/block

Runtime to sort block: temp123.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,135 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 135,621 milliseconds

Destination File for block has been created

writing sorted array to file temp123.txt

Runtime to send sorted array to file:temp123.txt time = 3,573 milliseconds

starting to create file 124

sorting file/block

Runtime to sort block: temp124.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,162 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 136,783 milliseconds

Destination File for block has been created

writing sorted array to file temp124.txt

Runtime to send sorted array to file:temp124.txt time = 3,365 milliseconds

starting to create file 125

sorting file/block

Runtime to sort block: temp125.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,102 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 137,885 milliseconds

Destination File for block has been created

writing sorted array to file temp125.txt

Runtime to send sorted array to file:temp125.txt time = 3,716 milliseconds

starting to create file 126

sorting file/block

Runtime to sort block: temp126.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,156 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 139,041 milliseconds

Destination File for block has been created

writing sorted array to file temp126.txt

Runtime to send sorted array to file:temp126.txt time = 4,161 milliseconds

starting to create file 127

sorting file/block

Runtime to sort block: temp127.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,160 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 140,201 milliseconds

Destination File for block has been created

writing sorted array to file temp127.txt

Runtime to send sorted array to file:temp127.txt time = 3,223 milliseconds

starting to create file 128

sorting file/block

Runtime to sort block: temp128.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,107 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 141,308 milliseconds

Destination File for block has been created

writing sorted array to file temp128.txt

Runtime to send sorted array to file:temp128.txt time = 3,545 milliseconds

starting to create file 129

sorting file/block

Runtime to sort block: temp129.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,110 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 142,418 milliseconds

Destination File for block has been created

writing sorted array to file temp129.txt

Runtime to send sorted array to file:temp129.txt time = 3,625 milliseconds

starting to create file 130

sorting file/block

Runtime to sort block: temp130.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,216 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 143,634 milliseconds

Destination File for block has been created

writing sorted array to file temp130.txt

Runtime to send sorted array to file:temp130.txt time = 3,820 milliseconds

starting to create file 131

sorting file/block

Runtime to sort block: temp131.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,189 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 144,823 milliseconds

Destination File for block has been created

writing sorted array to file temp131.txt

Runtime to send sorted array to file:temp131.txt time = 3,978 milliseconds

starting to create file 132

sorting file/block

Runtime to sort block: temp132.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,131 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 145,954 milliseconds

Destination File for block has been created

writing sorted array to file temp132.txt

Runtime to send sorted array to file:temp132.txt time = 3,392 milliseconds

starting to create file 133

sorting file/block

Runtime to sort block: temp133.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,134 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 147,088 milliseconds

Destination File for block has been created

writing sorted array to file temp133.txt

Runtime to send sorted array to file:temp133.txt time = 3,846 milliseconds

starting to create file 134

sorting file/block

Runtime to sort block: temp134.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,103 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 148,191 milliseconds

Destination File for block has been created

writing sorted array to file temp134.txt

Runtime to send sorted array to file:temp134.txt time = 3,740 milliseconds

starting to create file 135

sorting file/block

Runtime to sort block: temp135.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,179 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 149,370 milliseconds

Destination File for block has been created

writing sorted array to file temp135.txt

Runtime to send sorted array to file:temp135.txt time = 3,825 milliseconds

starting to create file 136

sorting file/block

Runtime to sort block: temp136.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,118 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 150,488 milliseconds

Destination File for block has been created

writing sorted array to file temp136.txt

Runtime to send sorted array to file:temp136.txt time = 3,191 milliseconds

starting to create file 137

sorting file/block

Runtime to sort block: temp137.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,153 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 151,641 milliseconds

Destination File for block has been created

writing sorted array to file temp137.txt

Runtime to send sorted array to file:temp137.txt time = 3,267 milliseconds

starting to create file 138

sorting file/block

Runtime to sort block: temp138.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,144 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 152,785 milliseconds

Destination File for block has been created

writing sorted array to file temp138.txt

Runtime to send sorted array to file:temp138.txt time = 3,976 milliseconds

starting to create file 139

sorting file/block

Runtime to sort block: temp139.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,119 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 153,904 milliseconds

Destination File for block has been created

writing sorted array to file temp139.txt

Runtime to send sorted array to file:temp139.txt time = 3,684 milliseconds

starting to create file 140

sorting file/block

Runtime to sort block: temp140.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,094 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 154,998 milliseconds

Destination File for block has been created

writing sorted array to file temp140.txt

Runtime to send sorted array to file:temp140.txt time = 3,529 milliseconds

starting to create file 141

sorting file/block

Runtime to sort block: temp141.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,147 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 156,145 milliseconds

Destination File for block has been created

writing sorted array to file temp141.txt

Runtime to send sorted array to file:temp141.txt time = 3,572 milliseconds

starting to create file 142

sorting file/block

Runtime to sort block: temp142.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,144 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 157,289 milliseconds

Destination File for block has been created

writing sorted array to file temp142.txt

Runtime to send sorted array to file:temp142.txt time = 4,306 milliseconds

starting to create file 143

sorting file/block

Runtime to sort block: temp143.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,130 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 158,419 milliseconds

Destination File for block has been created

writing sorted array to file temp143.txt

Runtime to send sorted array to file:temp143.txt time = 4,024 milliseconds

starting to create file 144

sorting file/block

Runtime to sort block: temp144.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,130 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 159,549 milliseconds

Destination File for block has been created

writing sorted array to file temp144.txt

Runtime to send sorted array to file:temp144.txt time = 3,855 milliseconds

starting to create file 145

sorting file/block

Runtime to sort block: temp145.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,153 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 160,702 milliseconds

Destination File for block has been created

writing sorted array to file temp145.txt

Runtime to send sorted array to file:temp145.txt time = 4,815 milliseconds

starting to create file 146

sorting file/block

Runtime to sort block: temp146.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,121 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 161,823 milliseconds

Destination File for block has been created

writing sorted array to file temp146.txt

Runtime to send sorted array to file:temp146.txt time = 3,872 milliseconds

starting to create file 147

sorting file/block

Runtime to sort block: temp147.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,117 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 162,940 milliseconds

Destination File for block has been created

writing sorted array to file temp147.txt

Runtime to send sorted array to file:temp147.txt time = 3,703 milliseconds

starting to create file 148

sorting file/block

Runtime to sort block: temp148.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,086 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 164,026 milliseconds

Destination File for block has been created

writing sorted array to file temp148.txt

Runtime to send sorted array to file:temp148.txt time = 3,736 milliseconds

starting to create file 149

sorting file/block

Runtime to sort block: temp149.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,087 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 165,113 milliseconds

Destination File for block has been created

writing sorted array to file temp149.txt

Runtime to send sorted array to file:temp149.txt time = 5,299 milliseconds

starting to create file 150

sorting file/block

Runtime to sort block: temp150.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,150 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 166,263 milliseconds

Destination File for block has been created

writing sorted array to file temp150.txt

Runtime to send sorted array to file:temp150.txt time = 6,359 milliseconds

starting to create file 151

sorting file/block

Runtime to sort block: temp151.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,133 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 167,396 milliseconds

Destination File for block has been created

writing sorted array to file temp151.txt

Runtime to send sorted array to file:temp151.txt time = 5,351 milliseconds

starting to create file 152

sorting file/block

Runtime to sort block: temp152.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,086 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 168,482 milliseconds

Destination File for block has been created

writing sorted array to file temp152.txt

Runtime to send sorted array to file:temp152.txt time = 4,324 milliseconds

starting to create file 153

sorting file/block

Runtime to sort block: temp153.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,091 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 169,573 milliseconds

Destination File for block has been created

writing sorted array to file temp153.txt

Runtime to send sorted array to file:temp153.txt time = 4,223 milliseconds

starting to create file 154

sorting file/block

Runtime to sort block: temp154.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,077 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 170,650 milliseconds

Destination File for block has been created

writing sorted array to file temp154.txt

Runtime to send sorted array to file:temp154.txt time = 3,250 milliseconds

starting to create file 155

sorting file/block

Runtime to sort block: temp155.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,103 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 171,753 milliseconds

Destination File for block has been created

writing sorted array to file temp155.txt

Runtime to send sorted array to file:temp155.txt time = 3,562 milliseconds

starting to create file 156

sorting file/block

Runtime to sort block: temp156.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,069 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 172,822 milliseconds

Destination File for block has been created

writing sorted array to file temp156.txt

Runtime to send sorted array to file:temp156.txt time = 4,061 milliseconds

starting to create file 157

sorting file/block

Runtime to sort block: temp157.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,099 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 173,921 milliseconds

Destination File for block has been created

writing sorted array to file temp157.txt

Runtime to send sorted array to file:temp157.txt time = 5,083 milliseconds

starting to create file 158

sorting file/block

Runtime to sort block: temp158.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,110 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 175,031 milliseconds

Destination File for block has been created

writing sorted array to file temp158.txt

Runtime to send sorted array to file:temp158.txt time = 4,279 milliseconds

starting to create file 159

sorting file/block

Runtime to sort block: temp159.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,141 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 176,172 milliseconds

Destination File for block has been created

writing sorted array to file temp159.txt

Runtime to send sorted array to file:temp159.txt time = 4,539 milliseconds

starting to create file 160

sorting file/block

Runtime to sort block: temp160.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,106 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 177,278 milliseconds

Destination File for block has been created

writing sorted array to file temp160.txt

Runtime to send sorted array to file:temp160.txt time = 4,196 milliseconds

starting to create file 161

sorting file/block

Runtime to sort block: temp161.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,060 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 178,338 milliseconds

Destination File for block has been created

writing sorted array to file temp161.txt

Runtime to send sorted array to file:temp161.txt time = 5,120 milliseconds

starting to create file 162

sorting file/block

Runtime to sort block: temp162.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,048 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 179,386 milliseconds

Destination File for block has been created

writing sorted array to file temp162.txt

Runtime to send sorted array to file:temp162.txt time = 3,128 milliseconds

starting to create file 163

sorting file/block

Runtime to sort block: temp163.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,004 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 180,390 milliseconds

Destination File for block has been created

writing sorted array to file temp163.txt

Runtime to send sorted array to file:temp163.txt time = 3,593 milliseconds

starting to create file 164

sorting file/block

Runtime to sort block: temp164.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,006 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 181,396 milliseconds

Destination File for block has been created

writing sorted array to file temp164.txt

Runtime to send sorted array to file:temp164.txt time = 2,946 milliseconds

starting to create file 165

sorting file/block

Runtime to sort block: temp165.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,029 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 182,425 milliseconds

Destination File for block has been created

writing sorted array to file temp165.txt

Runtime to send sorted array to file:temp165.txt time = 3,003 milliseconds

starting to create file 166

sorting file/block

Runtime to sort block: temp166.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,023 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 183,448 milliseconds

Destination File for block has been created

writing sorted array to file temp166.txt

Runtime to send sorted array to file:temp166.txt time = 3,290 milliseconds

starting to create file 167

sorting file/block

Runtime to sort block: temp167.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,164 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 184,612 milliseconds

Destination File for block has been created

writing sorted array to file temp167.txt

Runtime to send sorted array to file:temp167.txt time = 3,637 milliseconds

starting to create file 168

sorting file/block

Runtime to sort block: temp168.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,140 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 185,752 milliseconds

Destination File for block has been created

writing sorted array to file temp168.txt

Runtime to send sorted array to file:temp168.txt time = 4,068 milliseconds

starting to create file 169

sorting file/block

Runtime to sort block: temp169.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,151 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 186,903 milliseconds

Destination File for block has been created

writing sorted array to file temp169.txt

Runtime to send sorted array to file:temp169.txt time = 3,398 milliseconds

starting to create file 170

sorting file/block

Runtime to sort block: temp170.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,102 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 188,005 milliseconds

Destination File for block has been created

writing sorted array to file temp170.txt

Runtime to send sorted array to file:temp170.txt time = 4,330 milliseconds

starting to create file 171

sorting file/block

Runtime to sort block: temp171.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,067 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 189,072 milliseconds

Destination File for block has been created

writing sorted array to file temp171.txt

Runtime to send sorted array to file:temp171.txt time = 4,203 milliseconds

starting to create file 172

sorting file/block

Runtime to sort block: temp172.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,123 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 190,195 milliseconds

Destination File for block has been created

writing sorted array to file temp172.txt

Runtime to send sorted array to file:temp172.txt time = 4,455 milliseconds

starting to create file 173

sorting file/block

Runtime to sort block: temp173.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,147 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 191,342 milliseconds

Destination File for block has been created

writing sorted array to file temp173.txt

Runtime to send sorted array to file:temp173.txt time = 3,659 milliseconds

starting to create file 174

sorting file/block

Runtime to sort block: temp174.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,088 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 192,430 milliseconds

Destination File for block has been created

writing sorted array to file temp174.txt

Runtime to send sorted array to file:temp174.txt time = 3,492 milliseconds

starting to create file 175

sorting file/block

Runtime to sort block: temp175.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,175 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 193,605 milliseconds

Destination File for block has been created

writing sorted array to file temp175.txt

Runtime to send sorted array to file:temp175.txt time = 3,460 milliseconds

starting to create file 176

sorting file/block

Runtime to sort block: temp176.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,071 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 194,676 milliseconds

Destination File for block has been created

writing sorted array to file temp176.txt

Runtime to send sorted array to file:temp176.txt time = 3,708 milliseconds

starting to create file 177

sorting file/block

Runtime to sort block: temp177.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,111 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 195,787 milliseconds

Destination File for block has been created

writing sorted array to file temp177.txt

Runtime to send sorted array to file:temp177.txt time = 3,585 milliseconds

starting to create file 178

sorting file/block

Runtime to sort block: temp178.txt of SIZE = 5,555,555 double numbers using quickSort time = 1,195 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 196,982 milliseconds

Destination File for block has been created

writing sorted array to file temp178.txt

Runtime to send sorted array to file:temp178.txt time = 4,573 milliseconds

starting to create file 179

sorting file/block

Runtime to sort block: temp179.txt of SIZE = 5,555,655 double numbers using quickSort time = 1,045 milliseconds

Total Time spent so far in sorting the blocks: sorting cummulative time = 198,027 milliseconds

Destination File for block has been created

writing sorted array to file temp179.txt

Runtime to send sorted array to file:temp179.txt time = 4,474 milliseconds

Runtime for writing sorted data set of size for N = 1,000,000,000 values time = 6,242,946 miliseconds

The first 20 element of sorted data text file

1: 0.0

2: 0.0

3: 0.0

4: 0.0

5: 0.0

6: 0.0

7: 0.0

8: 0.0

9: 0.0

10: 0.0

11: 0.0

12: 0.0

13: 0.0

14: 0.0

15: 0.0

16: 0.0

17: 0.0

18: 0.0

19: 0.0

20: 0.0

Final Total Time spent so far in sorting the file: sorting cummulative time = 198,027 milliseconds

BUILD SUCCESSFUL (total time: 198 minutes 44 seconds)