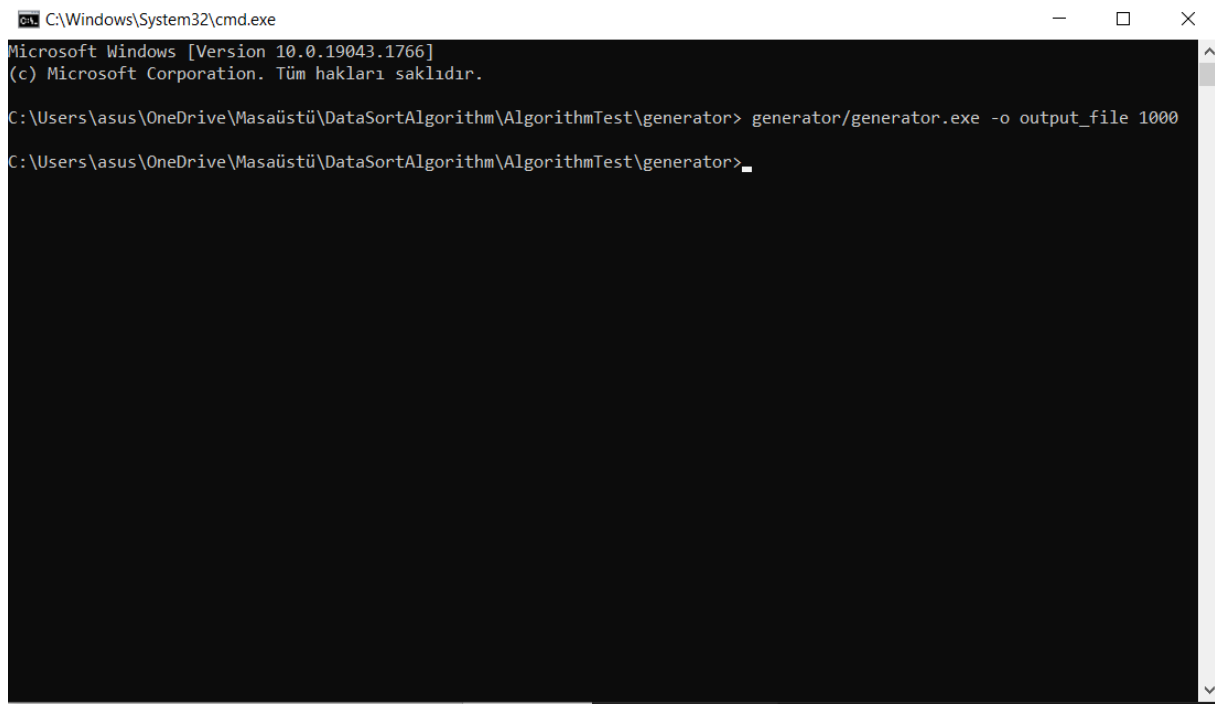


I created a file named output\_file with using generator.exe

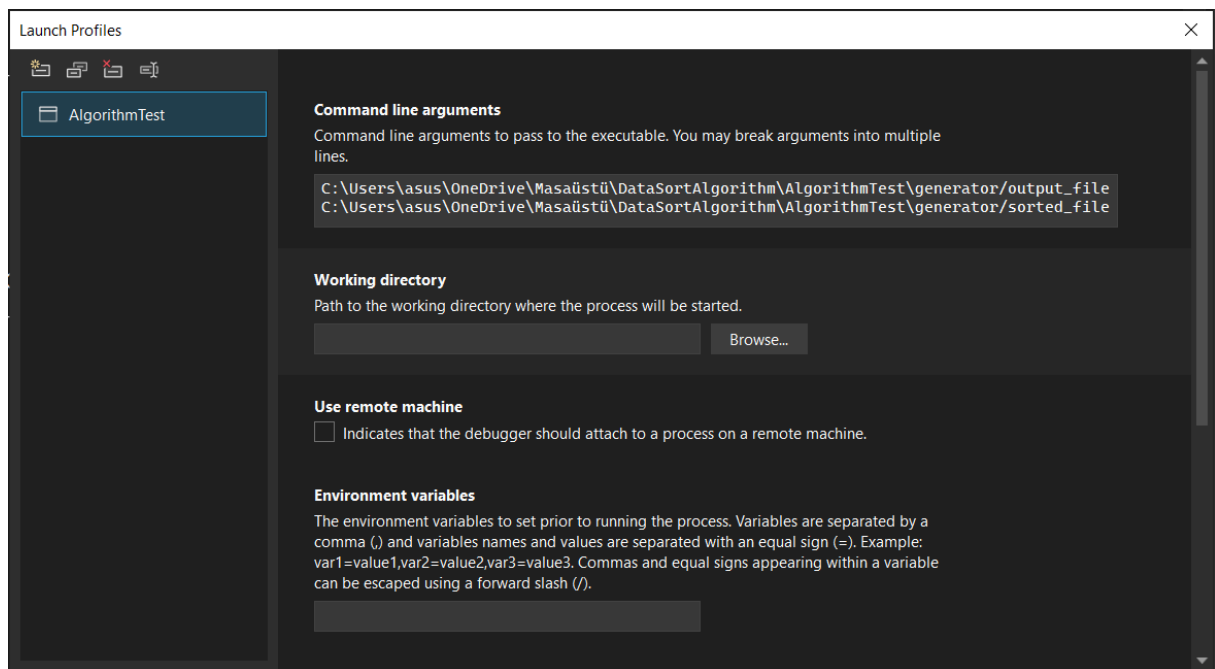


```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.19043.1766]
(c) Microsoft Corporation. Tüm hakları saklıdır.

C:\Users\asus\OneDrive\Masaüstü\DataSortAlgorithm\AlgorithmTest\generator> generator/generator.exe -o output_file 1000

C:\Users\asus\OneDrive\Masaüstü\DataSortAlgorithm\AlgorithmTest\generator>
```

I gave the file paths to Args[0] and Args[1]

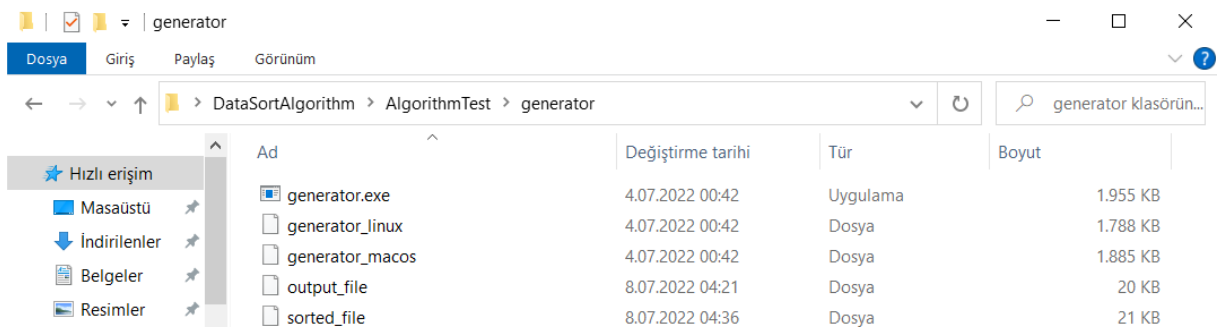


And then I started to coding in `Sorter` class. I defined a variable named `lineList` which let me acces to the `output_file( string inputPath)` and I created a ulong list `numberList`.

I wrote a foreach loop on `lineList` and convert all the data to `UInt64` and add them into `numberlist`. Then I created a for loop(`bubble sorting algorithm`) for sorting all the data inside of `numberList`. After that I defined a string list named `sortedList(carrying sorted numbers in string form)` and wrote it on `output_path(sorted_file)`.

```
1 namespace Core
2 {
3     1 reference
4     public class Sorter
5     {
6         1 reference
7         public void Sort(string inputPath, string outputPath)
8         {
9             // Code here
10            var lineList = File.ReadLines(inputPath);
11            List<ulong> numberList = new List<ulong>();
12            foreach (var item in lineList)
13            {
14                numberList.Add(Convert.ToUInt64(item));
15            }
16            ulong temp;
17            for (int j = 0; j <= numberList.Count - 2; j++)
18            {
19                for (int i = 0; i <= numberList.Count - 2; i++)
20                {
21                    if (numberList[i] > numberList[i + 1])
22                    {
23                        temp = numberList[i + 1];
24                        numberList[i + 1] = numberList[i];
25                        numberList[i] = temp;
26                    }
27                }
28            }
29            var sortedList = new List<string>();
30            numberList.ForEach(x => sortedList.Add(x.ToString()));
31            File.WriteAllLines(outputPath, sortedList);
32            Console.WriteLine("sorted numbers moved to sorted_file");
33        }
34    }
35 }
```

It's after when I run the program. I'm still wondering why `sorted_file` is 21 kb(`output_file` has 1000 lines of number it's equal to 20kb).



Ad	Değiştirme tarihi	Tür	Boyut
generator.exe	4.07.2022 00:42	Uygulama	1.955 KB
generator_linux	4.07.2022 00:42	Dosya	1.788 KB
generator_macos	4.07.2022 00:42	Dosya	1.885 KB
output_file	8.07.2022 04:21	Dosya	20 KB
sorted_file	8.07.2022 04:36	Dosya	21 KB

When output\_path has more size than 100mb, this is the error I saw. "Out of memory".

```
C:\Windows\System32\cmd.exe
Press Ctrl-C to end execution without terminating the process.

Hello, World!
sorted numbers moved to sorted_file

C:\Users\asus\OneDrive\Masaüstü\DataSortAlgorithm\AlgorithmTest> procgov.exe -maxmem 100M .\bin\debug\net6.0\AlgorithmTest.exe C:\Users\asus\OneDrive\Masaüstü\DataSortAlgorithm\AlgorithmTest\generator/output_file C:\Users\asus\OneDrive\Masaüstü\DataSortAlgorithm\AlgorithmTest\generator/sorted_file
Process Governor v1.0.0.0 - sets limits on your processes
Copyright (C) 2019 Sebastian Solnica (lowleveldesign.org)

CPU affinity mask:                (not set)
Max CPU rate:                    (not set)
Max bandwidth (B):               (not set)
Maximum committed memory (MB):   100
Maximum job committed memory (MB): (not set)
Minimum WS memory (MB):          (not set)
Maximum WS memory (MB):          (not set)
Preferred NUMA node:             (not set)
Process user-time execution limit (ms): (not set)
Job user-time execution limit (ms): (not set)
Clock-time execution limit (ms): (not set)

Press Ctrl-C to end execution without terminating the process.

Hello, World!
Out of memory.

C:\Users\asus\OneDrive\Masaüstü\DataSortAlgorithm\AlgorithmTest>
```

And this is the message when it has less size than 100mb,

```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.19043.1766]
(c) Microsoft Corporation. Tüm hakları saklıdır.

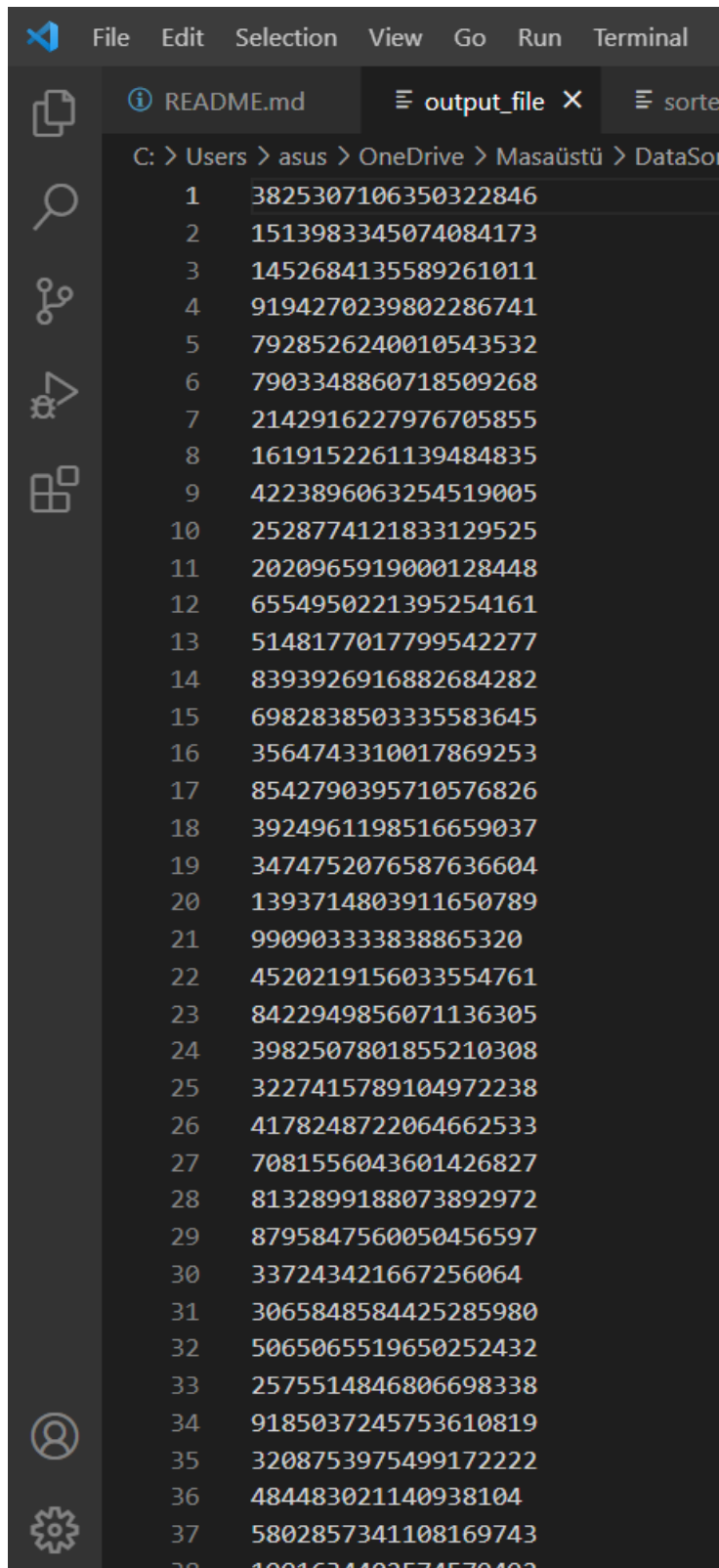
C:\Users\asus\OneDrive\Masaüstü\DataSortAlgorithm\AlgorithmTest> procgov.exe -maxmem 100M .\bin\debug\net6.0\AlgorithmTest.exe C:\Users\asus\OneDrive\Masaüstü\DataSortAlgorithm\AlgorithmTest\generator/output_file C:\Users\asus\OneDrive\Masaüstü\DataSortAlgorithm\AlgorithmTest\generator/sorted_file
Process Governor v1.0.0.0 - sets limits on your processes
Copyright (C) 2019 Sebastian Solnica (lowleveldesign.org)

CPU affinity mask:                (not set)
Max CPU rate:                    (not set)
Max bandwidth (B):               (not set)
Maximum committed memory (MB):   100
Maximum job committed memory (MB): (not set)
Minimum WS memory (MB):          (not set)
Maximum WS memory (MB):          (not set)
Preferred NUMA node:             (not set)
Process user-time execution limit (ms): (not set)
Job user-time execution limit (ms): (not set)
Clock-time execution limit (ms): (not set)


Press Ctrl-C to end execution without terminating the process.


Hello, World!
sorted numbers moved to sorted_file

C:\Users\asus\OneDrive\Masaüstü\DataSortAlgorithm\AlgorithmTest>
```



```
File Edit Selection View Go Run Terminal  
C: > Users > asus > OneDrive > Masaüstü > DataSor  
1 3825307106350322846  
2 1513983345074084173  
3 1452684135589261011  
4 9194270239802286741  
5 7928526240010543532  
6 7903348860718509268  
7 2142916227976705855  
8 1619152261139484835  
9 4223896063254519005  
10 2528774121833129525  
11 2020965919000128448  
12 6554950221395254161  
13 5148177017799542277  
14 8393926916882684282  
15 6982838503335583645  
16 3564743310017869253  
17 8542790395710576826  
18 3924961198516659037  
19 3474752076587636604  
20 1393714803911650789  
21 990903333838865320  
22 4520219156033554761  
23 8422949856071136305  
24 3982507801855210308  
25 3227415789104972238  
26 4178248722064662533  
27 7081556043601426827  
28 8132899188073892972  
29 8795847560050456597  
30 337243421667256064  
31 3065848584425285980  
32 5065065519650252432  
33 2575514846806698338  
34 9185037245753610819  
35 3208753975499172222  
36 484483021140938104  
37 5802857341108169743  
38 1991634402574579492
```

FileEditSelectionViewGoRunTerminalHelp









README.md

output\_file

sorted\_file X

C: > Users > asus > OneDrive > Masaüstü > DataSortAlgorithm > AlgorithmTest



120843033758314908

237108648481216098

341138738889975295

463706955390963582

564214909140346217

664355181257866068

789587221431277023

899051349543450797

9107680991971197564

10110776129068297864

11114480881343204707

12124756332619506830

13135761006337404882

14143071987059435048

15161967608371077256

16180474135604325152

17186648009825769370

18210892978382988614

19215703148094127948

20215799129473309990

21226407363851530788

22236447686588255454

23265595345289202729

24271490086228858330

25308952182928654781

26322070128940884400

27328303908282748791

28329386119046534277

29332312401032333778

30333429364212578346

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32337243421667256064

33342515490978430214

34345563675218678490

35387761557104242360

36393437534747236695

37408031896915918315