In this assignment, Part1 and Part2 parts were partially coded. Part3 coding started, but unfortunately not raised.

First, programs are compiled using the "make" command. After that, "programA" and "programB" executable files are created.

First, programs are compiled using the "make" command. After that, "programA" and "programB" executable files are created. As explained in the homework pdf, data must be entered with the parameters -i -o and -t for these programs. When data is missing or incorrect, the program ends. Examples of errors that can occur with incorrect inputs:

The program runs after the correct inputs are entered. A txt file must be entered after the -i parameter. Similarly, a txt must be entered after the -o parameter. If there is no txt file after the -o parameter, it is created.
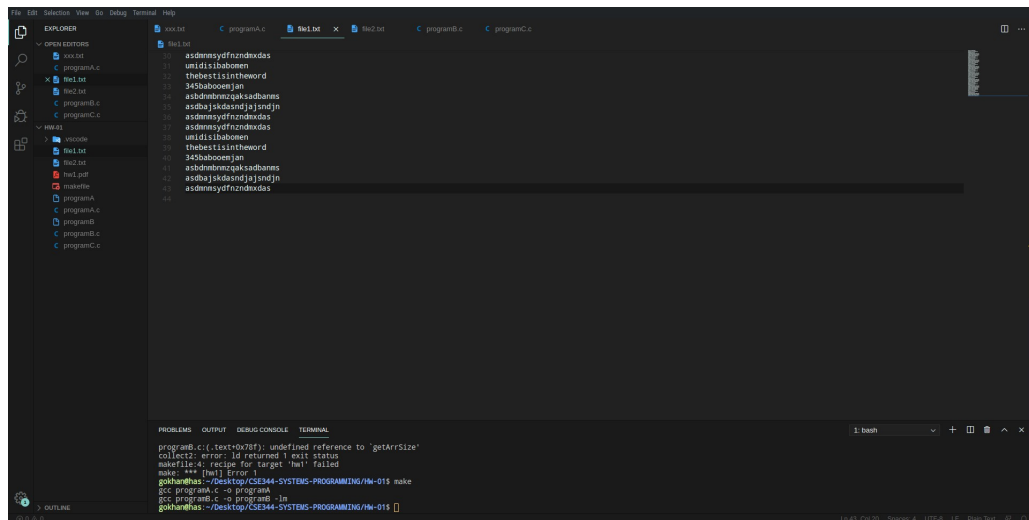
Example of input file...
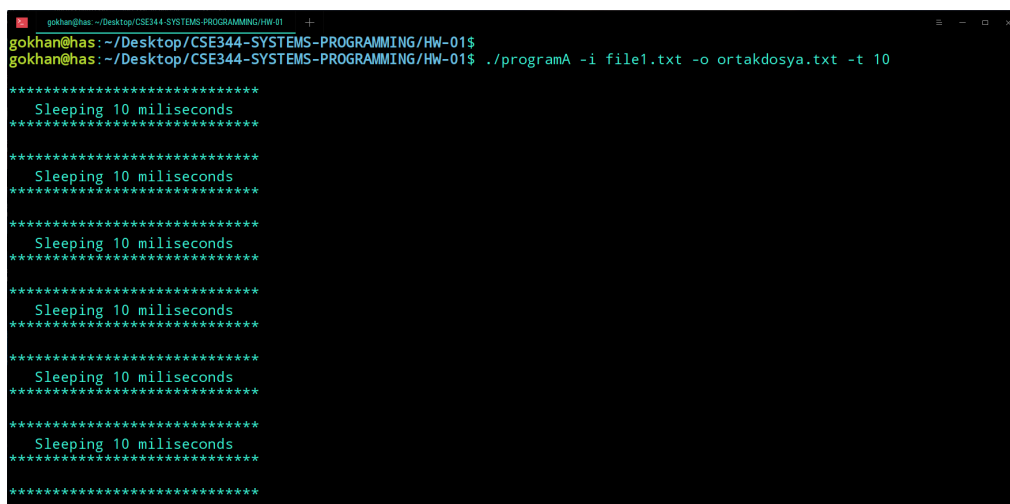
Example of run programA with normal input(upper) then created ouputfile(below)
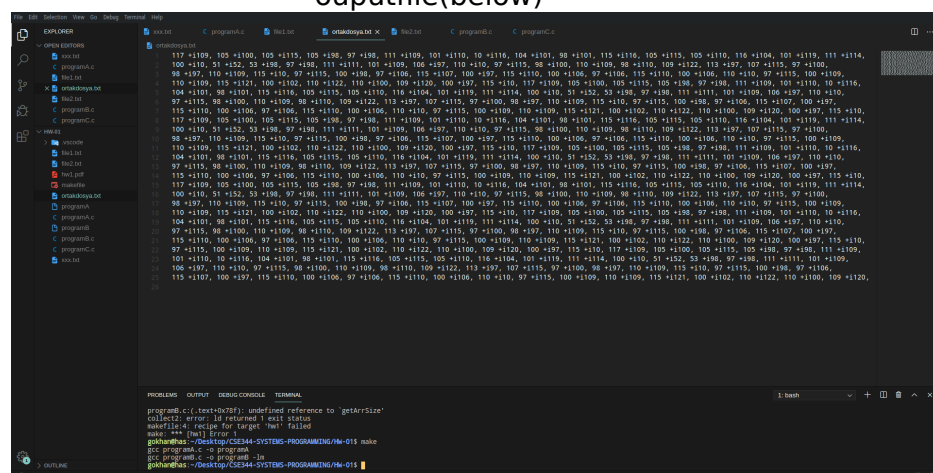
The controls so far were those common to both programs.

Two A programs need to write to the output file at the same time. So fcntl is used. The files get locked when reading and writing are done. Thus, they are prevented from writing to the file at the same time.
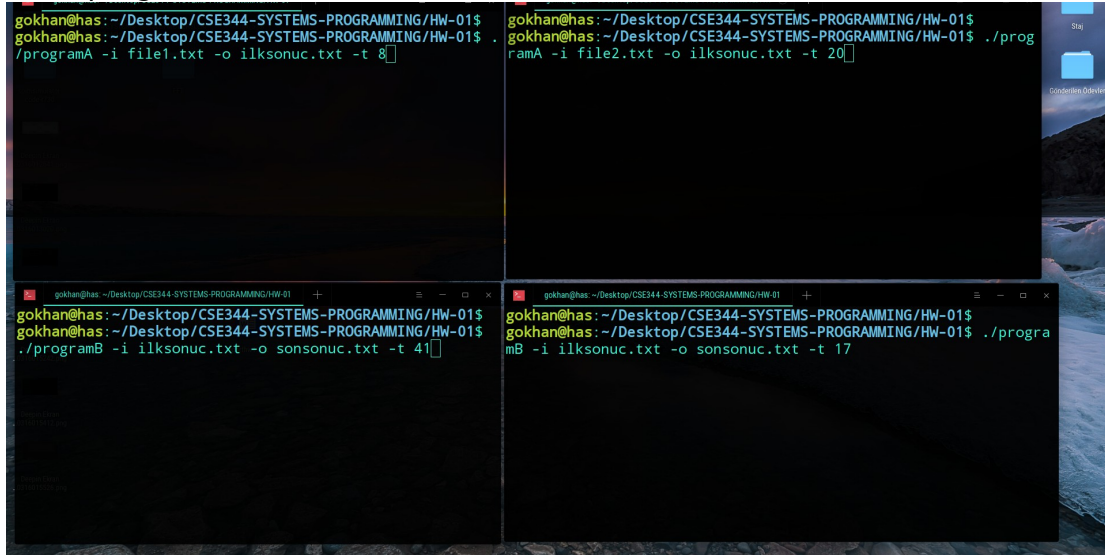
When the program runs, it creates a txt named "xxx.txt". This file should be deleted by the user every time the program runs. Otherwise,

the programs crash.
It works when normal inputs are entered in programBs. But it is the responsibility of the user to enter the output of programA into programB.

RESULTS :
Before programs run

After programs run

Common File (programA's output and programB's input) :

ilksonuc.txt

```
117 +i109, 105 +i100, 105 +i115, 105 +i98, 97 +i98, 111 +i109, 101 +i110, 10 +i116, 104 +i101, 98 +i101, 115 +i116, 105 +i115, 105 +i110, 116 +i104, 101 +i119, 111 +i114,
100 +i10, 51 +i52, 53 +i98, 97 +i98, 111 +i111, 101 +i109, 106 +i97, 110 +i110, 97 +i115, 98 +i100, 110 +i109, 98 +i110, 109 +i122, 113 +i97, 107 +i115, 97 +i100,
98 +i97, 110 +i109, 115 +i10, 97 +i115, 100 +i98, 97 +i106, 115 +i107, 100 +i97, 115 +i110, 100 +i106, 97 +i106, 115 +i110, 100 +i106, 110 +i10, 97 +i115, 100 +i109,
110 +i109, 115 +i121, 100 +i102, 110 +i122, 110 +i100, 109 +i120, 100 +i97, 115 +i10, 117 +i109, 105 +i100, 105 +i115, 105 +i98, 97 +i98, 111 +i109, 101 +i110, 10 +i116,
104 +i101, 98 +i101, 115 +i116, 105 +i115, 105 +i110, 116 +i104, 101 +i119, 111 +i114, 100 +i10, 51 +i52, 53 +i98, 97 +i98, 111 +i111, 101 +i109, 106 +i97, 110 +i10,
97 +i115, 98 +i100, 110 +i109, 98 +i110, 109 +i122, 113 +i97, 107 +i115, 97 +i100, 98 +i97, 110 +i109, 115 +i10, 97 +i115, 100 +i98, 97 +i106, 115 +i107, 100 +i97,
115 +i110, 100 +i106, 97 +i106, 115 +i110, 100 +i106, 110 +i10, 97 +i115, 100 +i109, 115 +i121, 100 +i102, 110 +i122, 110 +i100, 109 +i120, 100 +i97, 115 +i10,
117 +i109, 105 +i100, 105 +i115, 105 +i98, 97 +i98, 111 +i109, 101 +i110, 10 +i116, 104 +i101, 98 +i101, 115 +i116, 105 +i115, 105 +i110, 116 +i104, 101 +i119, 111 +i114,
100 +i10, 51 +i52, 53 +i98, 97 +i98, 111 +i111, 101 +i109, 106 +i97, 110 +i10,
98 +i97, 110 +i109, 115 +i10, 97 +i115, 100 +i98, 97 +i106, 115 +i107, 100 +i97, 115 +i110, 100 +i106, 97 +i106, 115 +i110, 100 +i106, 110 +i10, 97 +i115, 100 +i109,
110 +i109, 115 +i121, 100 +i102, 110 +i122, 110 +i100, 109 +i120, 100 +i97, 115 +i10, 117 +i109, 105 +i100, 105 +i115, 105 +i98, 97 +i98, 111 +i109, 101 +i110, 10 +i116,
104 +i101, 98 +i101, 115 +i116, 105 +i115, 105 +i110, 116 +i104, 101 +i119, 111 +i114, 100 +i10, 51 +i52, 53 +i98, 97 +i98, 111 +i111, 101 +i109, 106 +i97, 110 +i10,
97 +i115, 98 +i100, 110 +i109, 98 +i110, 109 +i122, 113 +i97, 107 +i115, 97 +i100, 98 +i97, 110 +i109, 115 +i10, 97 +i115, 100 +i98, 97 +i106, 115 +i107, 100 +i97,
115 +i110, 100 +i106, 97 +i106, 115 +i110, 100 +i106, 110 +i10, 97 +i115, 100 +i109, 115 +i121, 100 +i102, 110 +i122, 110 +i100, 109 +i120, 100 +i97, 115 +i10,
117 +i109, 105 +i100, 105 +i115, 105 +i98, 97 +i98, 111 +i109, 101 +i110, 10 +i116, 104 +i101, 98 +i101, 115 +i116, 105 +i115, 105 +i110, 116 +i104, 101 +i119, 111 +i114,
100 +i10, 51 +i52, 53 +i98, 97 +i98, 111 +i111, 101 +i109, 106 +i97, 110 +i10, 97 +i115, 98 +i100, 110 +i109, 98 +i110, 109 +i122, 113 +i97, 107 +i115, 97 +i100,
98 +i97, 110 +i109, 115 +i10, 97 +i115, 100 +i98, 97 +i106, 115 +i107, 100 +i97, 115 +i110, 100 +i106, 97 +i106, 115 +i110, 100 +i106, 110 +i10, 97 +i115, 100 +i109,
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107 +i100, 97 +i115, 110 +i100, 106 +i97, 106, 115 +i110, 100 +i106, 110 +i10, 97 +i115, 100 +i109, 115 +i121, 100 +i102, 110 +i122, 110 +i100, 109 +i120, 120 +i100,
97 +i100, 98 +i97, 110 +i109, 115 +i10, 97 +i115, 100 +i98, 97 +i106, 115 +i107, 100 +i97, 115 +i110, 100 +i106, 97 +i106, 115 +i110, 100 +i106, 110 +i10, 97 +i115,
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110 +i10, 97 +i115, 98 +i100, 110 +i109, 98 +i110, 109 +i122, 113 +i97, 107 +i115, 97 +i100, 98 +i97, 110 +i109, 115 +i10, 97 +i115, 100 +i98, 97 +i106, 115 +i107,
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97 +i110, 10 +i97, 115 +i98, 100 +i110, 109 +i98, 110 +i109, 122 +i113, 97 +i107, 115 +i97, 100 +i98, 97 +i110, 109 +i115, 10 +i97, 115 +i100, 98 +i97, 106 +i115,
107 +i100, 97 +i115, 110 +i100, 106 +i97, 106, 115 +i110, 100 +i106, 110 +i10, 97 +i115, 100 +i109, 115 +i121, 100 +i102, 110 +i122, 110 +i100, 109 +i120, 120 +i100,
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115 +i100, 109 +i110, 109 +i115, 121 +i100, 102 +i110, 122 +i110, 100 +i109, 120 +i100, 97 +i115, 10 +i117, 109 +i105, 100 +i105, 115 +i105, 98 +i97, 98 +i111, 109 +i101,
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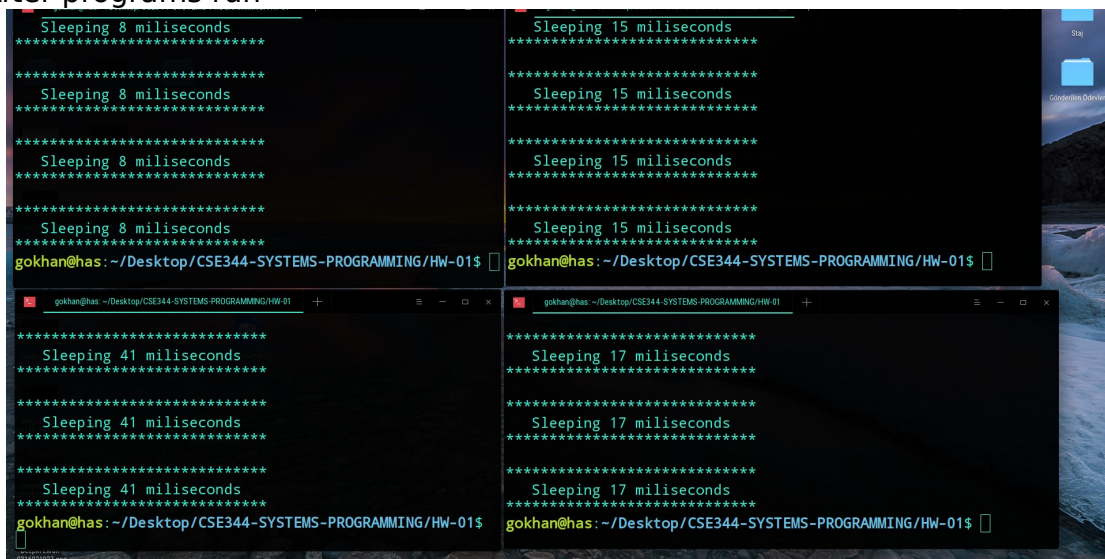
ProgramB's output

sonsonuc.txt

```
1705.613, 7.118 +i20.801, 5.098 +i-3.383, 0.687 +i24.858, 40.131 +i5.988, 8.100 +i35.159, 24.928 +i-5.137, 4.099 +i-8.874, -44.175, 4.099 +i8.874, 24.928 +i5.137, 8.100 +i-3
1473.890, -19.017 +i105.084, -155.688 +i131.955, 112.109 +i119.607, -25.564 +i62.324, 178.405 +i93.285, -10.611 +i24.810, 141.020 +i30.770, -89.601, 141.020 +i-30.770, -10.6
1575.280, 111.014 +i-106.155, -59.083 +i137.255, -26.047 +i-112.475, 76.568 +i97.589, -45.734 +i-84.832, 93.059 +i18.130, -31.218 +i-10.534, 45.268, -31.218 +i10.534, 93.059
1488.780, -43.865 +i-100.900, -62.784 +i103.666, -181.586 +i-13.586, -42.509 +i-43.232, -65.078 +i59.226, -100.947 +i-31.517, -113.462 +i0.450, -106.461, -113.462 +i-0.450,
1577.653, -42.195 +i91.093, 44.216 +i117.095, 79.735 +i18.551, 52.612 +i-39.267, -30.042 +i-65.253, 6.048 +i-13.827, -3.480 +i6.765, -13.618, -3.480 +i-6.765, 6.048 +i13.827
1488.780, -43.865 +i-100.900, -62.784 +i103.666, -181.586 +i-13.586, -42.509 +i-43.232, -65.078 +i59.226, -100.947 +i-31.517, -113.462 +i0.450, -106.461, -113.462 +i-0.450,
1593.269, 79.932 +i-140.559, 73.265 +i138.827, -95.893 +i-18.982, 115.575 +i-76.568, -42.885 +i74.719, -34.993 +i-78.619, 42.803 +i21.682, -27.275, 42.803 +i-21.682, -34.993
1691.483, 0.406 +i16.494, -12.917 +i-5.997, 9.098 +i18.878, -8.142 +i-40.131, 15.252 +i-20.938, -35.389 +i-13.995, -21.313 +i6.630, 30.045, -21.313 +i-6.630, -35.389 +i13.995
1477.026, 25.781 +i104.365, -13.642 +i203.396, 156.544 +i-57.805, 65.461 +i25.563, 21.049 +i-200.524, 28.185 +i-10.041, -115.373 +i-82.394, 92.738, -115.373 +i82.394, 28.185
1612.462, -96.212 +i58.938, -77.644 +i67.733, -82.956 +i89.192, 19.110 +i74.125, 29.936 +i84.285, 29.656 +i173.456, 97.288 +i50.032, 103.024, 97.288 +i-50.032, 29.656 +i-73.4
1613.499, 124.389 +i8.558, -85.807 +i-1.524, 104.145 +i-19.109, -94.098 +i-1.849, 88.861 +i-18.015, -85.961 +i-49.548, 102.541 +i13.132, -80.038, 102.541 +i-13.132, -85.961
1517.818, -98.259 +i-77.892, 7.804 +i83.832, -43.132 +i155.427, -100.139 +i175.284, 11.449 +i16.825, 176.459 +i67.846, 54.490 +i179.540, 18.597, 54.490 +i-179.540, 176.459 +i
```