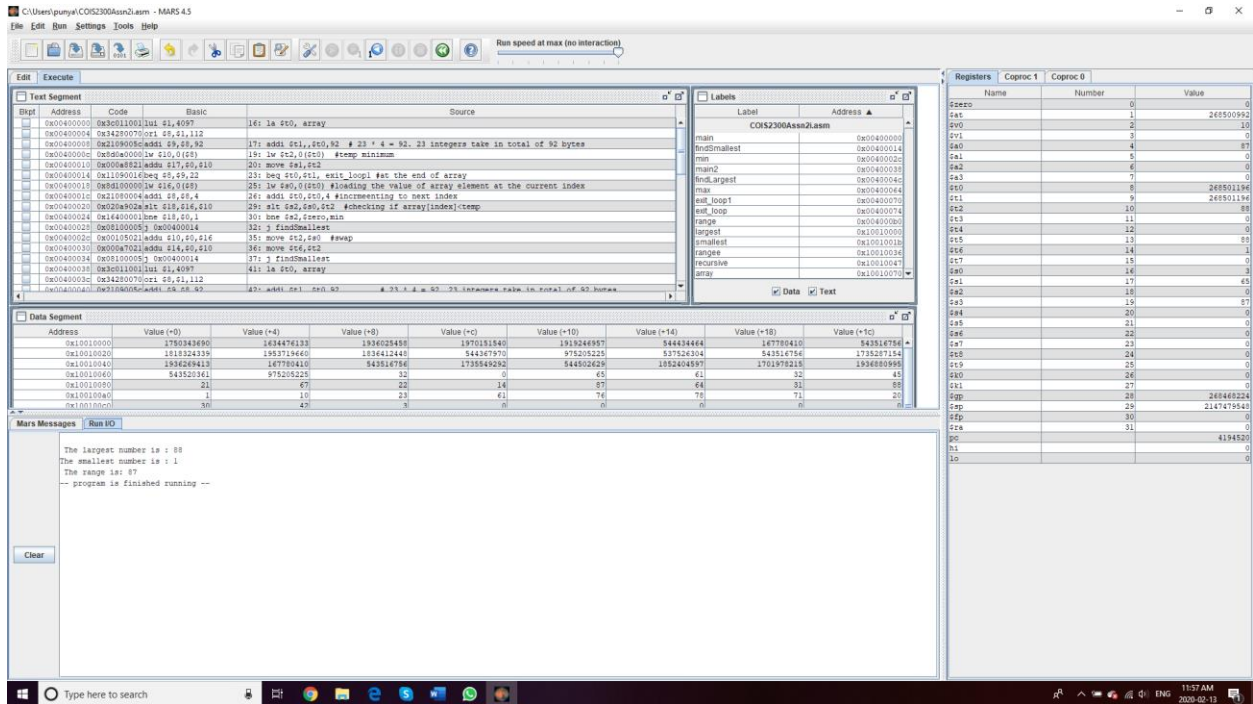


Testing Documentation Assignment 2

I: MIPS Programming

Test 1: Integers, finding largest, smallest, and their range



The largest number of the array, which contains the integers :
65,61,32,45,21,67,22,14,87,64,31,88,1,10,23,61,76,78,71,20,30,42,3

Is 88, which is correctly printed. The smallest number, which is 1, is correctly printed. And the range would be 88-1=87, correctly printed.

Test 2: finding largest with recursion

Run speed at max (no interaction)

Registers Coproc 1 Coproc 0

Name	Number	Value
Eax	0	0
Ecx	1	26950092
Edx	2	10
Esi	3	0
Edi	4	88
Eax	5	0
Ecx	6	0
Edx	7	0
Esi	8	26950114
Edi	9	26950114
Eax	10	88
Ecx	11	0
Edx	12	0
Esi	13	0
Edi	14	0
Eax	15	0
Ecx	16	0
Edx	17	0
Esi	18	0
Edi	19	0
Eax	20	0
Ecx	21	0
Edx	22	0
Esi	23	0
Edi	24	0
Eax	25	0
Ecx	26	0
Edx	27	0
Esi	28	0
Edi	29	0
Eax	30	0
Ecx	31	0
Edx	32	0
Esi	33	0
Edi	34	0
Eax	35	0
Ecx	36	0
Edx	37	0
Esi	38	0
Edi	39	0

Mars Messages Run IO

```

The largest number is : 88
The smallest number is : 1
The range is: 87
-- program is finished running --

The largest number is : 88
The smallest number is : 1
The range is: 87
The largest using recursive is : 88
-- program is finished running --

The largest number is : 1118930592
The smallest number is : 1065353216
The range is: 53477376
-- program is finished running --

```

Again, 88 printed, which is correct, so yaay.

Test 3 : find largest, smallest, range from array of floating - point numbers

Run speed at max (no interaction)

Registers Coproc 1 Coproc 0

Name	Number	Value
Eax	0	0
Ecx	1	26950092
Edx	2	10
Esi	3	0
Edi	4	53477376
Eax	5	0
Ecx	6	0
Edx	7	0
Esi	8	26950114
Edi	9	26950114
Eax	10	88
Ecx	11	0
Edx	12	0
Esi	13	0
Edi	14	0
Eax	15	1118930592
Ecx	16	1065353216
Edx	17	0
Esi	18	1077936128
Edi	19	1115015936
Eax	20	0
Ecx	21	0
Edx	22	0
Esi	23	0
Edi	24	0
Eax	25	0
Ecx	26	0
Edx	27	0
Esi	28	0
Edi	29	0
Eax	30	0
Ecx	31	0
Edx	32	0
Esi	33	0
Edi	34	0
Eax	35	0
Ecx	36	0
Edx	37	0
Esi	38	0
Edi	39	0

Mars Messages Run IO

```

The largest number is : 88
The smallest number is : 1
The range is: 87
-- program is finished running --

The largest number is : 88
The smallest number is : 1
The range is: 87
The largest using recursive is : 88
-- program is finished running --

The largest number is : 1118930592
The smallest number is : 1065353216
The range is: 53477376
-- program is finished running --

```

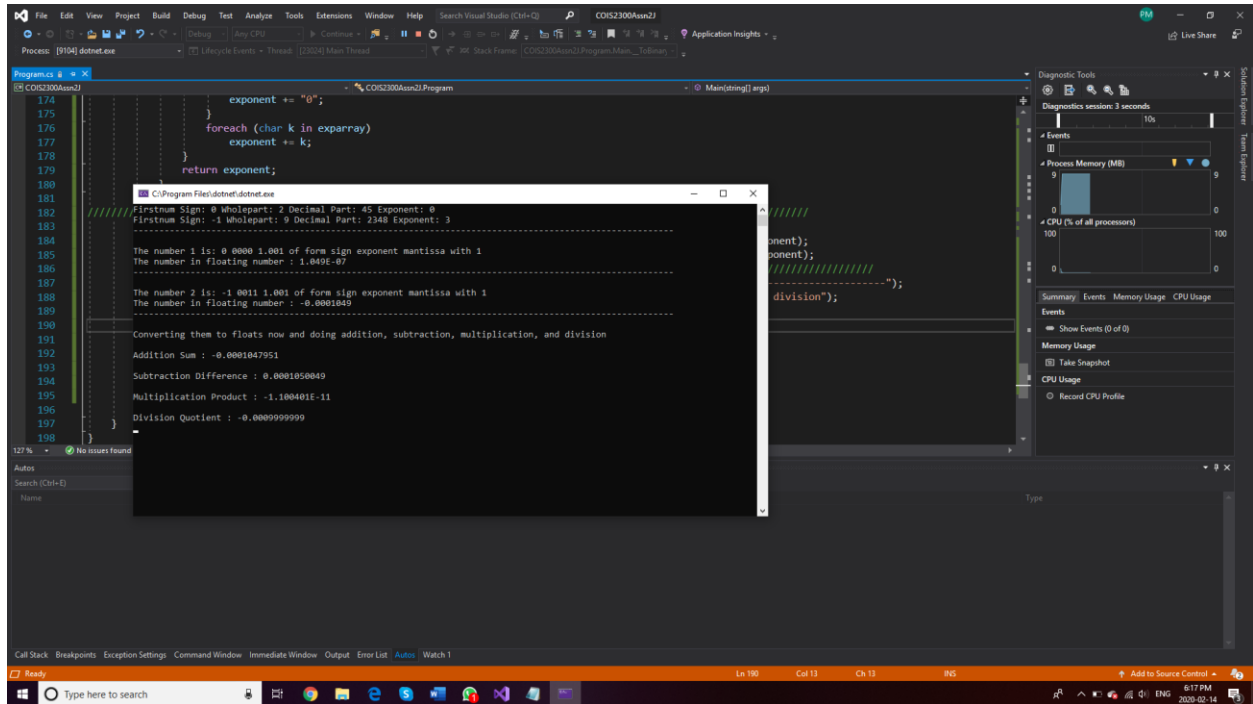
Again correctly printed.

J: Mini Float Programming

Test 1 :

Number 1 : +2.45, exponent = 0

Number 2 : - 9.2348, exponent = 3



```
174         exponent += "0";
175     }
176     foreach (char k in exparray)
177     {
178         exponent += k;
179     }
180     return exponent;
181 }
182
183 //-----
184
185 The number 1 is: 0 0000 1.001 of form sign exponent mantissa with 1
186 The number in floating number : 1.049E-07
187
188 The number 2 is: -1 0011 1.001 of form sign exponent mantissa with 1
189 The number in floating number : -8.0001949
190
191 Converting them to floats now and doing addition, subtraction, multiplication, and division
192
193 Addition Sum : -0.0001047951
194 Subtraction Difference : 0.0001050049
195 Multiplication Product : -1.000401E-11
196 Division Quotient : -0.0009999999
197
198 }
```

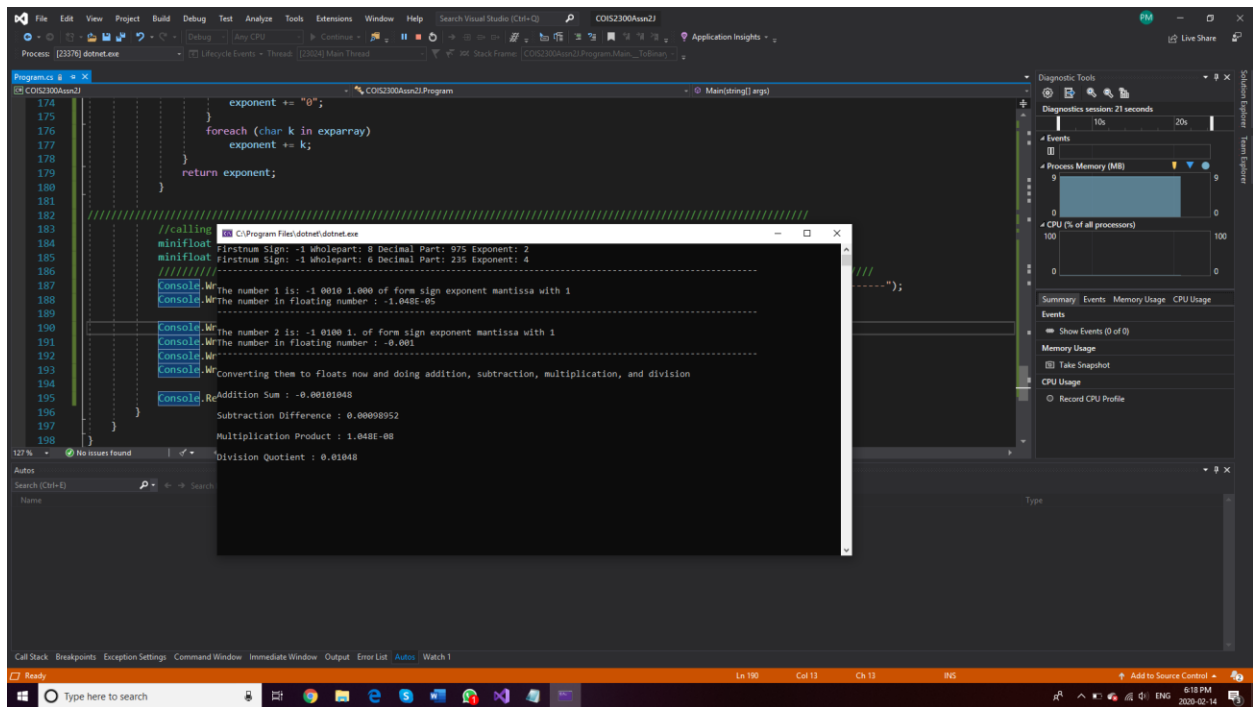
Call Stack Breakpoints Exception Settings Command Window Immediate Window Output Error List Autos Watch 1

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Test 2 :

Number 1 : -8.975, exponent = 2

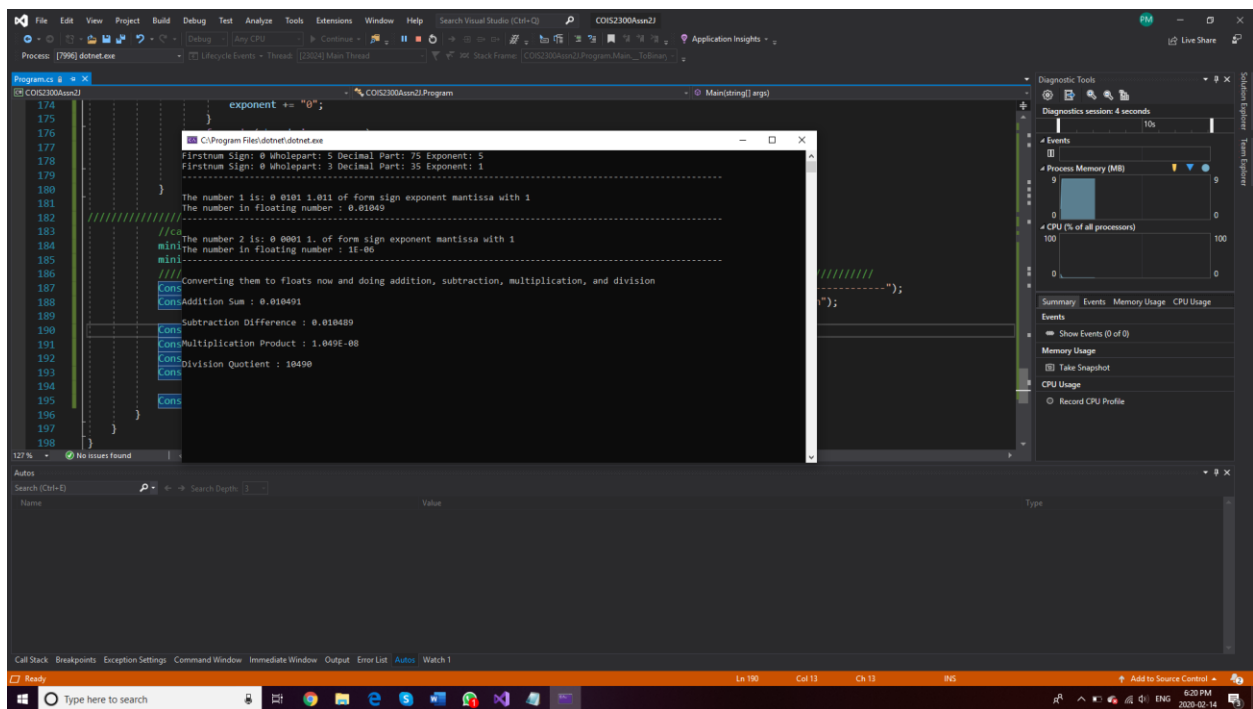
Number 2 : - 6.235, exponent = 4



Test 3 :

Number 1 : +5.75, exponent = 5

Number 2 : +3.35, exponent = 1



Test 4 :

Number 1 : -7.7987, exponent = 8

Number 2 : +1.876, exponent = 5

