

Sequence sum

Submission deadline:	2022-11-21 11:59:59	427709.101 sec
Late submission with malus:	2022-12-31 23:59:59 (Late submission malus: 100.0000 %)	
Evaluation:	6.8750	
Max. assessment:	5.0000 (Without bonus points)	
Submissions:	14 / 20 Free retries + 10 Penalized retries (-10 % penalty each retry)	
Advices:	2 / 2 Advices for free + 2 Advices with a penalty (-10 % penalty each advice)	

The problem is to develop a program to analyze input sequence.

Assume a sequence of numbers. We may choose a contiguous range from the input sequence, for instance, we may choose the range between the 5-th number and the 10-th number. A range must contain at least two numbers. The sum of the numbers may be compute for such range. We choose all possible ranges from the input sequence and we compute the sum for each of them. We are interested how many different ranges exist in the input sequence such that these ranges have the same sum.

For instance, the input sequence may be:

1 5 2 4 2 2 2

there is a total of 21 contiguous ranges of length ≥ 2 , in particular:

0..1:	1 5	sum=6
0..2:	1 5 2	sum=8
0..3:	1 5 2 4	sum=12
0..4:	1 5 2 4 2	sum=14
0..5:	1 5 2 4 2 2	sum=16
0..6:	1 5 2 4 2 2 2	sum=18
1..2:	5 2	sum=7
1..3:	5 2 4	sum=11
1..4:	5 2 4 2	sum=13
1..5:	5 2 4 2 2	sum=15
1..6:	5 2 4 2 2 2	sum=17
2..3:	2 4	sum=6
2..4:	2 4 2	sum=8
2..5:	2 4 2 2	sum=10
2..6:	2 4 2 2 2	sum=12
3..4:	4 2	sum=6
3..5:	4 2 2	sum=8
3..6:	4 2 2 2	sum=10
4..5:	2 2	sum=4
4..6:	2 2 2	sum=6
5..6:	2 2	sum=4

Of these 21 ranges, there are 12 pairs such that the ranges in the pair have the same sum:

0..1 ~ 2..3	sum=6
0..1 ~ 3..4	sum=6
0..1 ~ 4..6	sum=6
0..2 ~ 2..4	sum=8
0..2 ~ 3..5	sum=8
0..3 ~ 2..6	sum=12
2..3 ~ 3..4	sum=6
2..3 ~ 4..6	sum=6

```

2..4 ~ 3..5      sum=8
2..5 ~ 3..6      sum=10
3..4 ~ 4..6      sum=6
4..5 ~ 5..6      sum=4

```

The input of the program is a sequence of integers (positive, zero, and negative values). The reading of the input sequence is terminated when EOF is reached. The input sequence is at most 2000 numbers long.

The output of the program is the total number of pairs of ranges such that the sums of the ranges are the same.

The program must detect invalid input. The following is considered an error:

- the input sequence is empty (does not contain any number),
- the input sequence is too long (over 2000 numbers),
- the input is not a valid integer.

This problem is evaluated in a "bonus" mode. There will be some points deduced for a slow implementation (naive slow algorithm). On the other hand, a fast implementation may be awarded some extra points in the bonus test.

Example program output:

Input sequence:

1 5 2 4

Total pairs: 1

Input sequence:

1 5 2 4 2 2 2

Total pairs: 12

Input sequence:

1 5 6

20 -20

Total pairs: 3

Input sequence:

2 2 1 7 7

Total pairs: 0

Input sequence:

1 1 2 3 5 8

Total pairs: 0

Input sequence:

abcd

Invalid input.

Advice:

- The sample runs above list both the output of your program (boldface font) and user input (regular font). The bold/regular formatting is included here, in the problem statement page, to increase readability of the listing. Your program must output the text without any additional markup.
- Do not forget the newline (`\n`) after the last output line.
- A reasonable implementation of the naive algorithm with $O(n^6)$ time complexity passes all tests except the speed tests. An improved algorithm with $O(n^4)$ time complexity passes the first speed test. Even more efficient algorithm is required to pass the second speed test.
-

- There is quite a lot of free memory available for the computation (several hundreds MiB).

Sample data:[Download](#)**Submit:**[Submit](#)☐ **Reference****14****2022-11-09 21:20:09**[Download](#)**Submission status:**

Evaluated

Evaluation:

6.8750

- **Evaluator: computer**

- Program compiled
- Test 'Basic test with example input data': success
 - result: 100.00 %, required: 100.00 %
 - Max. run time: 0.005 s (limit: 1.000 s)
 - Total run time: 0.031 s
 - Mandatory test success, evaluation: 100.00 %
- Test 'Borderline test': success
 - result: 100.00 %, required: 50.00 %
 - Max. run time: 0.005 s (limit: 1.000 s)
 - Total run time: 0.055 s
 - Optional test success, evaluation: 100.00 %
- Test 'Invalid input test': success
 - result: 100.00 %, required: 50.00 %
 - Max. run time: 0.005 s (limit: 1.000 s)
 - Total run time: 0.026 s
 - Optional test success, evaluation: 100.00 %
- Test 'Random test': success
 - result: 100.00 %, required: 50.00 %
 - Max. run time: 0.006 s (limit: 2.000 s)
 - Total run time: 0.057 s
 - Optional test success, evaluation: 100.00 %
- Test 'Random test + mem debugger': success
 - result: 100.00 %, required: 50.00 %
 - Max. run time: 0.020 s (limit: 2.000 s)
 - Total run time: 0.108 s
 - Optional test success, evaluation: 100.00 %
- Test 'Speed test I': success
 - result: 100.00 %, required: 50.00 %
 - Max. run time: 0.020 s (limit: 2.000 s)
 - Total run time: 0.069 s
 - Optional test success, evaluation: 100.00 %
- Test 'Speed test II': success
 - result: 100.00 %, required: 100.00 %
 - Max. run time: 0.880 s (limit: 2.000 s)
 - Total run time: 4.333 s
 - Bonus test - success, evaluation: 125.00 %
- Overall ratio: 125.00 % (= 1.00 * 1.00 * 1.00 * 1.00 * 1.00 * 1.00 * 1.25)
- Advices used: 2
- Penalty due to advices: None (2 ≤ 2 limit)
- Total percent: 125.00 %
- Early submission bonus: 0.50
- Total points: 1.25 * (5.00 + 0.50) = 6.88

Total

Average

Maximum Function name

SW metrics:	Functions:	6	--	-- --
	Lines of code:	82	13.67 ± 6.29	22 readData
	Cyclomatic complexity:	17	2.83 ± 1.34	5 readData

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Submission status:	Evaluated
Evaluation:	6.8750

- **Evaluator: computer**

- Program compiled
- Test 'Basic test with example input data': success
 - result: 100.00 %, required: 100.00 %
 - Max. run time: 0.005 s (limit: 1.000 s)
 - Total run time: 0.030 s
 - Mandatory test success, evaluation: 100.00 %
- Test 'Borderline test': success
 - result: 100.00 %, required: 50.00 %
 - Max. run time: 0.006 s (limit: 1.000 s)
 - Total run time: 0.055 s
 - Optional test success, evaluation: 100.00 %
- Test 'Invalid input test': success
 - result: 100.00 %, required: 50.00 %
 - Max. run time: 0.006 s (limit: 1.000 s)
 - Total run time: 0.027 s
 - Optional test success, evaluation: 100.00 %
- Test 'Random test': success
 - result: 100.00 %, required: 50.00 %
 - Max. run time: 0.007 s (limit: 2.000 s)
 - Total run time: 0.058 s
 - Optional test success, evaluation: 100.00 %
- Test 'Random test + mem debugger': success
 - result: 100.00 %, required: 50.00 %
 - Max. run time: 0.021 s (limit: 2.000 s)
 - Total run time: 0.115 s
 - Optional test success, evaluation: 100.00 %
- Test 'Speed test I': success
 - result: 100.00 %, required: 50.00 %
 - Max. run time: 0.023 s (limit: 2.000 s)
 - Total run time: 0.076 s
 - Optional test success, evaluation: 100.00 %
- Test 'Speed test II': success
 - result: 100.00 %, required: 100.00 %
 - Max. run time: 0.809 s (limit: 2.000 s)
 - Total run time: 4.644 s
 - Bonus test - success, evaluation: 125.00 %
- Overall ratio: 125.00 % (= 1.00 * 1.00 * 1.00 * 1.00 * 1.00 * 1.00 * 1.25)
- Advices used: 2
- Penalty due to advices: None (2 ≤ 2 limit)
- Total percent: 125.00 %
- Early submission bonus: 0.50
- Total points: 1.25 * (5.00 + 0.50) = 6.88

SW metrics:	Functions:	Total	Average	Maximum	Function name
	Lines of code:	6	--	-- --	
	Cyclomatic complexity:	82	13.67 ± 6.29	22	readData
		17	2.83 ± 1.34	5	readData

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2022-11-09 20:24:33

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Submission status:

Evaluated

Evaluation:

3.8500

• Evaluator: computer

◦ Program compiled

◦ Test 'Basic test with example input data': success

▪ result: 100.00 %, required: 100.00 %

▪ Max. run time: 0.005 s (limit: 1.000 s)

▪ Total run time: 0.028 s

▪ Mandatory test success, evaluation: 100.00 %

◦ Test 'Borderline test': success

▪ result: 100.00 %, required: 50.00 %

▪ Max. run time: 0.005 s (limit: 1.000 s)

▪ Total run time: 0.052 s

▪ Optional test success, evaluation: 100.00 %

◦ Test 'Invalid input test': success

▪ result: 100.00 %, required: 50.00 %

▪ Max. run time: 0.005 s (limit: 1.000 s)

▪ Total run time: 0.023 s

▪ Optional test success, evaluation: 100.00 %

◦ Test 'Random test': success

▪ result: 100.00 %, required: 50.00 %

▪ Max. run time: 0.007 s (limit: 2.000 s)

▪ Total run time: 0.055 s

▪ Optional test success, evaluation: 100.00 %

◦ Test 'Random test + mem debugger': success

▪ result: 100.00 %, required: 50.00 %

▪ Max. run time: 0.039 s (limit: 2.000 s)

▪ Total run time: 0.206 s

▪ Optional test success, evaluation: 100.00 %

◦ Test 'Speed test I': success

▪ result: 100.00 %, required: 50.00 %

▪ Max. run time: 0.023 s (limit: 2.000 s)

▪ Total run time: 0.072 s

▪ Optional test success, evaluation: 100.00 %

◦ Test 'Speed test II': failed

▪ result: 87.50 %, required: 100.00 %

▪ Max. run time: 0.878 s (limit: 2.000 s)

▪ Total run time: 4.276 s

▪ Bonus test - failed, evaluation: No bonus awarded

▪ Failed (invalid output) [Unlock advice (2.08 KiB, incomplete data)]

◦ Detected total of 5 leaked memory blocks (30 % penalty).

◦ Overall ratio: 70.00 % (= (1.00 * 1.00 * 1.00 * 1.00 * 1.00 * 1.00) * 0.7)

• Advices used: 2

• Penalty due to advices: None (2 <= 2 limit)

• Total percent: 70.00 %

• Early submission bonus: 0.50

• Total points: 0.70 * (5.00 + 0.50) = 3.85

SW metrics:

Functions:

Lines of code:

Cyclomatic complexity:

Total

Average

Maximum

Function name

6

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81

13.50 ± 6.21

22

readData

17

2.83 ± 1.34

5

readData

11

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Submission status: Evaluated

Evaluation: 2.4750

• **Evaluator: computer**

- Compile in 'pedantic' mode failed (10 % penalty). **[Unlock advice (308 B)]**
- Test 'Basic test with example input data': success
 - result: 100.00 %, required: 100.00 %
 - Max. run time: 0.005 s (limit: 1.000 s)
 - Total run time: 0.029 s
 - Mandatory test success, evaluation: 100.00 %
- Test 'Borderline test': success
 - result: 100.00 %, required: 50.00 %
 - Max. run time: 0.005 s (limit: 1.000 s)
 - Total run time: 0.053 s
 - Optional test success, evaluation: 100.00 %
- Test 'Invalid input test': success
 - result: 100.00 %, required: 50.00 %
 - Max. run time: 0.005 s (limit: 1.000 s)
 - Total run time: 0.024 s
 - Optional test success, evaluation: 100.00 %
- Test 'Random test': success
 - result: 100.00 %, required: 50.00 %
 - Max. run time: 0.006 s (limit: 2.000 s)
 - Total run time: 0.055 s
 - Optional test success, evaluation: 100.00 %
- Test 'Random test + mem debugger': success
 - result: 100.00 %, required: 50.00 %
 - Max. run time: 0.018 s (limit: 2.000 s)
 - Total run time: 0.097 s
 - Optional test success, evaluation: 100.00 %
- Test 'Speed test I': Abnormal program termination (Segmentation fault/Bus error/Memory limit exceeded/Stack limit exceeded)
 - Max. run time: 0.004 s (limit: 2.000 s)
 - Total run time: 0.004 s
 - Optional test failed, evaluation: 50.00 %
 - Segmentation fault **[Unlock advice (485 B)]**
- Test 'Speed test II': Not tested
 - Bonus test - failed, evaluation: No bonus awarded
- Overall ratio: 45.00 % ($= (1.00 * 1.00 * 1.00 * 1.00 * 1.00 * 0.50) * 0.9$)
- Advices used: 2
- Penalty due to advices: None ($2 \leq 2$ limit)
- Total percent: 45.00 %
- Early submission bonus: 0.50
- Total points: $0.45 * (5.00 + 0.50) = 2.48$

		Total	Average	Maximum	Function name
SW metrics:	Functions:	6	--	--	--
	Lines of code:	81	13.50 ± 6.21	22	readData
	Cyclomatic complexity:	17	2.83 ± 1.34	5	readData

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2022-11-08 19:33:06

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Submission status: Evaluated

Evaluation: 5.5000

- **Evaluator: computer**

- Program compiled
- Test 'Basic test with example input data': success
 - result: 100.00 %, required: 100.00 %
 - Max. run time: 0.005 s (limit: 1.000 s)
 - Total run time: 0.030 s
 - Mandatory test success, evaluation: 100.00 %
- Test 'Borderline test': success
 - result: 100.00 %, required: 50.00 %
 - Max. run time: 0.005 s (limit: 1.000 s)
 - Total run time: 0.053 s
 - Optional test success, evaluation: 100.00 %
- Test 'Invalid input test': success
 - result: 100.00 %, required: 50.00 %
 - Max. run time: 0.005 s (limit: 1.000 s)
 - Total run time: 0.026 s
 - Optional test success, evaluation: 100.00 %
- Test 'Random test': success
 - result: 100.00 %, required: 50.00 %
 - Max. run time: 0.028 s (limit: 2.000 s)
 - Total run time: 0.123 s
 - Optional test success, evaluation: 100.00 %
- Test 'Random test + mem debugger': success
 - result: 100.00 %, required: 50.00 %
 - Max. run time: 0.021 s (limit: 2.000 s)
 - Total run time: 0.115 s
 - Optional test success, evaluation: 100.00 %
- Test 'Speed test I': success
 - result: 100.00 %, required: 50.00 %
 - Max. run time: 0.447 s (limit: 2.000 s)
 - Total run time: 1.004 s
 - Optional test success, evaluation: 100.00 %
- Test 'Speed test II': Abnormal program termination (Time limit exceeded)
 - Program was killed after: 2.004 s (limit: 2.000 s)
 - Bonus test - failed, evaluation: No bonus awarded
 - Time limit exceeded **[Unlock advice (2.00 KiB, incomplete data)]**
- Overall ratio: 100.00 % (= 1.00 * 1.00 * 1.00 * 1.00 * 1.00 * 1.00)
- Advices used: 2
- Penalty due to advices: None (2 <= 2 limit)
- Total percent: 100.00 %
- Early submission bonus: 0.50
- Total points: 1.00 * (5.00 + 0.50) = 5.50

		Total	Average	Maximum	Function name
SW metrics:	Functions:	5	--	-- --	
	Lines of code:	69	13.80 ± 5.42	22	readData
	Cyclomatic complexity:	17	3.40 ± 1.20	5	readData

9	2022-11-08 19:31:28	Download
Submission status:	Evaluated	
Evaluation:	5.5000	
<ul style="list-style-type: none">• Evaluator: computer<ul style="list-style-type: none">◦ Program compiled◦ Test 'Basic test with example input data': success<ul style="list-style-type: none">▪ result: 100.00 %, required: 100.00 %▪ Max. run time: 0.006 s (limit: 1.000 s)		

- Total run time: 0.031 s
 - Mandatory test success, evaluation: 100.00 %
- Test 'Borderline test': success
 - result: 100.00 %, required: 50.00 %
 - Max. run time: 0.005 s (limit: 1.000 s)
 - Total run time: 0.054 s
 - Optional test success, evaluation: 100.00 %
- Test 'Invalid input test': success
 - result: 100.00 %, required: 50.00 %
 - Max. run time: 0.005 s (limit: 1.000 s)
 - Total run time: 0.024 s
 - Optional test success, evaluation: 100.00 %
- Test 'Random test': success
 - result: 100.00 %, required: 50.00 %
 - Max. run time: 0.029 s (limit: 2.000 s)
 - Total run time: 0.121 s
 - Optional test success, evaluation: 100.00 %
- Test 'Random test + mem debugger': success
 - result: 100.00 %, required: 50.00 %
 - Max. run time: 0.022 s (limit: 2.000 s)
 - Total run time: 0.116 s
 - Optional test success, evaluation: 100.00 %
- Test 'Speed test I': success
 - result: 100.00 %, required: 50.00 %
 - Max. run time: 0.554 s (limit: 2.000 s)
 - Total run time: 1.108 s
 - Optional test success, evaluation: 100.00 %
- Test 'Speed test II': Abnormal program termination (Time limit exceeded)
 - Program was killed after: 2.004 s (limit: 2.000 s)
 - Bonus test - failed, evaluation: No bonus awarded
 - Time limit exceeded **[Unlock advice (2.00 KiB, incomplete data)]**
- Overall ratio: 100.00 % (= 1.00 * 1.00 * 1.00 * 1.00 * 1.00 * 1.00)
- Advices used: 2
- Penalty due to advices: None (2 <= 2 limit)
- Total percent: 100.00 %
- Early submission bonus: 0.50
- Total points: 1.00 * (5.00 + 0.50) = 5.50

		Total	Average	Maximum	Function name
SW metrics:	Functions:	6	--	--	--
	Lines of code:	80	13.33 ± 5.56	22	readData
	Cyclomatic complexity:	19	3.17 ± 1.21	5	readData

8	2022-11-08 07:12:59	Download
Submission status:	Evaluated	
Evaluation:	5.5000	
<ul style="list-style-type: none">• Evaluator: computer<ul style="list-style-type: none">◦ Program compiled◦ Test 'Basic test with example input data': success<ul style="list-style-type: none">▪ result: 100.00 %, required: 100.00 %▪ Max. run time: 0.005 s (limit: 1.000 s)▪ Total run time: 0.029 s▪ Mandatory test success, evaluation: 100.00 %◦ Test 'Borderline test': success<ul style="list-style-type: none">▪ result: 100.00 %, required: 50.00 %▪ Max. run time: 0.005 s (limit: 1.000 s)		

- Total run time: 0.051 s
 - Optional test success, evaluation: 100.00 %
- Test 'Invalid input test': success
 - result: 100.00 %, required: 50.00 %
 - Max. run time: 0.005 s (limit: 1.000 s)
 - Total run time: 0.024 s
 - Optional test success, evaluation: 100.00 %
- Test 'Random test': success
 - result: 100.00 %, required: 50.00 %
 - Max. run time: 0.028 s (limit: 2.000 s)
 - Total run time: 0.118 s
 - Optional test success, evaluation: 100.00 %
- Test 'Random test + mem debugger': success
 - result: 100.00 %, required: 50.00 %
 - Max. run time: 0.022 s (limit: 2.000 s)
 - Total run time: 0.113 s
 - Optional test success, evaluation: 100.00 %
- Test 'Speed test I': success
 - result: 100.00 %, required: 50.00 %
 - Max. run time: 0.555 s (limit: 2.000 s)
 - Total run time: 1.093 s
 - Optional test success, evaluation: 100.00 %
- Test 'Speed test II': Abnormal program termination (Time limit exceeded)
 - Program was killed after: 2.005 s (limit: 2.000 s)
 - Bonus test - failed, evaluation: No bonus awarded
 - Time limit exceeded **[Unlock advice (2.00 KiB, incomplete data)]**
- Overall ratio: 100.00 % (= 1.00 * 1.00 * 1.00 * 1.00 * 1.00 * 1.00)
- Advices used: 2
- Penalty due to advices: None (2 ≤ 2 limit)
- Total percent: 100.00 %
- Early submission bonus: 0.50
- Total points: 1.00 * (5.00 + 0.50) = 5.50

		Total	Average	Maximum	Function name
SW metrics:	Functions:	5	--	-- --	
	Lines of code:	69	13.80 ± 5.42	22	readData
	Cyclomatic complexity:	17	3.40 ± 1.20	5	readData

7 **2022-11-08 07:02:18** [Download](#)

Submission status: Evaluated

Evaluation: 5.5000

- **Evaluator: computer**
 - Program compiled
 - Test 'Basic test with example input data': success
 - result: 100.00 %, required: 100.00 %
 - Max. run time: 0.005 s (limit: 1.000 s)
 - Total run time: 0.027 s
 - Mandatory test success, evaluation: 100.00 %
 - Test 'Borderline test': success
 - result: 100.00 %, required: 50.00 %
 - Max. run time: 0.005 s (limit: 1.000 s)
 - Total run time: 0.051 s
 - Optional test success, evaluation: 100.00 %
 - Test 'Invalid input test': success
 - result: 100.00 %, required: 50.00 %
 - Max. run time: 0.005 s (limit: 1.000 s)

- Total run time: 0.023 s
 - Optional test success, evaluation: 100.00 %
- Test 'Random test': success
 - result: 100.00 %, required: 50.00 %
 - Max. run time: 0.030 s (limit: 2.000 s)
 - Total run time: 0.117 s
 - Optional test success, evaluation: 100.00 %
- Test 'Random test + mem debugger': success
 - result: 100.00 %, required: 50.00 %
 - Max. run time: 0.020 s (limit: 2.000 s)
 - Total run time: 0.110 s
 - Optional test success, evaluation: 100.00 %
- Test 'Speed test I': success
 - result: 100.00 %, required: 50.00 %
 - Max. run time: 0.462 s (limit: 2.000 s)
 - Total run time: 0.936 s
 - Optional test success, evaluation: 100.00 %
- Test 'Speed test II': Abnormal program termination (Time limit exceeded)
 - Program was killed after: 2.005 s (limit: 2.000 s)
 - Bonus test - failed, evaluation: No bonus awarded
 - Time limit exceeded **[Unlock advice (2.00 KiB, incomplete data)]**
- Overall ratio: 100.00 % (= 1.00 * 1.00 * 1.00 * 1.00 * 1.00 * 1.00)
- Advices used: 2
- Penalty due to advices: None (2 <= 2 limit)
- Total percent: 100.00 %
- Early submission bonus: 0.50
- Total points: 1.00 * (5.00 + 0.50) = 5.50

		Total	Average	Maximum	Function name
SW metrics:	Functions:	5	--	--	--
	Lines of code:	69	13.80 ± 5.42	22	readData
	Cyclomatic complexity:	17	3.40 ± 1.20	5	readData

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2022-11-07 20:26:33

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Submission status:

Evaluated

Evaluation:

5.5000

• Evaluator: computer

◦ Program compiled

◦ Test 'Basic test with example input data': success

▪ result: 100.00 %, required: 100.00 %

▪ Max. run time: 0.005 s (limit: 1.000 s)

▪ Total run time: 0.030 s

▪ Mandatory test success, evaluation: 100.00 %

◦ Test 'Borderline test': success

▪ result: 100.00 %, required: 50.00 %

▪ Max. run time: 0.005 s (limit: 1.000 s)

▪ Total run time: 0.055 s

▪ Optional test success, evaluation: 100.00 %

◦ Test 'Invalid input test': success

▪ result: 100.00 %, required: 50.00 %

▪ Max. run time: 0.005 s (limit: 1.000 s)

▪ Total run time: 0.025 s

▪ Optional test success, evaluation: 100.00 %

◦ Test 'Random test': success

▪ result: 100.00 %, required: 50.00 %

▪ Max. run time: 0.032 s (limit: 2.000 s)

- Total run time: 0.131 s
- Optional test success, evaluation: 100.00 %
- Test 'Random test + mem debugger': success
 - result: 100.00 %, required: 50.00 %
 - Max. run time: 0.020 s (limit: 2.000 s)
 - Total run time: 0.116 s
 - Optional test success, evaluation: 100.00 %
- Test 'Speed test I': success
 - result: 100.00 %, required: 50.00 %
 - Max. run time: 0.470 s (limit: 2.000 s)
 - Total run time: 1.035 s
 - Optional test success, evaluation: 100.00 %
- Test 'Speed test II': Abnormal program termination (Time limit exceeded)
 - Program was killed after: 2.006 s (limit: 2.000 s)
 - Bonus test - failed, evaluation: No bonus awarded
 - Time limit exceeded **[Unlock advice (2.00 KiB, incomplete data)]**
- Overall ratio: 100.00 % (= 1.00 * 1.00 * 1.00 * 1.00 * 1.00 * 1.00)
- Advices used: 2
- Penalty due to advices: None (2 <= 2 limit)
- Total percent: 100.00 %
- Early submission bonus: 0.50
- Total points: 1.00 * (5.00 + 0.50) = 5.50

		Total	Average	Maximum	Function name
SW metrics:	Functions:	4	--	-- --	
	Lines of code:	60	15.00 ± 9.03	30	main
	Cyclomatic complexity:	15	3.75 ± 1.09	5	main

5	2022-11-07 20:22:42	Download
Submission status:	Evaluated	
Evaluation:	5.5000	

- **Evaluator: computer**
 - Program compiled
 - Test 'Basic test with example input data': success
 - result: 100.00 %, required: 100.00 %
 - Max. run time: 0.005 s (limit: 1.000 s)
 - Total run time: 0.031 s
 - Mandatory test success, evaluation: 100.00 %
 - Test 'Borderline test': success
 - result: 100.00 %, required: 50.00 %
 - Max. run time: 0.005 s (limit: 1.000 s)
 - Total run time: 0.056 s
 - Optional test success, evaluation: 100.00 %
 - Test 'Invalid input test': success
 - result: 100.00 %, required: 50.00 %
 - Max. run time: 0.005 s (limit: 1.000 s)
 - Total run time: 0.025 s
 - Optional test success, evaluation: 100.00 %
 - Test 'Random test': success
 - result: 100.00 %, required: 50.00 %
 - Max. run time: 0.028 s (limit: 2.000 s)
 - Total run time: 0.123 s
 - Optional test success, evaluation: 100.00 %
 - Test 'Random test + mem debugger': success
 - result: 100.00 %, required: 50.00 %
 - Max. run time: 0.021 s (limit: 2.000 s)

- Total run time: 0.116 s
 - Optional test success, evaluation: 100.00 %
- Test 'Speed test I': success
 - result: 100.00 %, required: 50.00 %
 - Max. run time: 0.548 s (limit: 2.000 s)
 - Total run time: 1.104 s
 - Optional test success, evaluation: 100.00 %
- Test 'Speed test II': Abnormal program termination (Time limit exceeded)
 - Program was killed after: 2.004 s (limit: 2.000 s)
 - Bonus test - failed, evaluation: No bonus awarded
 - Time limit exceeded [**Unlock advice (2.00 KiB, incomplete data)**]
- Overall ratio: 100.00 % (= 1.00 * 1.00 * 1.00 * 1.00 * 1.00 * 1.00)
- Advices used: 2
- Penalty due to advices: None (2 <= 2 limit)
- Total percent: 100.00 %
- Early submission bonus: 0.50
- Total points: 1.00 * (5.00 + 0.50) = 5.50

	Total	Average	Maximum	Function name
SW metrics:				
Functions:	4	--	-- --	
Lines of code:	65	16.25 ± 11.12	35	main
Cyclomatic complexity:	15	3.75 ± 1.09	5	main

4	2022-11-07 20:21:34	Download
Submission status:	Evaluated	
Evaluation:	5.5000	

- **Evaluator: computer**
 - Program compiled
 - Test 'Basic test with example input data': success
 - result: 100.00 %, required: 100.00 %
 - Max. run time: 0.005 s (limit: 1.000 s)
 - Total run time: 0.031 s
 - Mandatory test success, evaluation: 100.00 %
 - Test 'Borderline test': success
 - result: 100.00 %, required: 50.00 %
 - Max. run time: 0.005 s (limit: 1.000 s)
 - Total run time: 0.056 s
 - Optional test success, evaluation: 100.00 %
 - Test 'Invalid input test': success
 - result: 100.00 %, required: 50.00 %
 - Max. run time: 0.005 s (limit: 1.000 s)
 - Total run time: 0.026 s
 - Optional test success, evaluation: 100.00 %
 - Test 'Random test': success
 - result: 100.00 %, required: 50.00 %
 - Max. run time: 0.028 s (limit: 2.000 s)
 - Total run time: 0.129 s
 - Optional test success, evaluation: 100.00 %
 - Test 'Random test + mem debugger': success
 - result: 100.00 %, required: 50.00 %
 - Max. run time: 0.022 s (limit: 2.000 s)
 - Total run time: 0.120 s
 - Optional test success, evaluation: 100.00 %
 - Test 'Speed test I': success
 - result: 100.00 %, required: 50.00 %
 - Max. run time: 0.550 s (limit: 2.000 s)

- Total run time: 1.117 s
- Optional test success, evaluation: 100.00 %
- Test 'Speed test II': Abnormal program termination (Time limit exceeded)
 - Program was killed after: 2.007 s (limit: 2.000 s)
 - Bonus test - failed, evaluation: No bonus awarded
 - Time limit exceeded **[Unlock advice (2.00 KiB, incomplete data)]**
- Overall ratio: 100.00 % (= 1.00 * 1.00 * 1.00 * 1.00 * 1.00 * 1.00)
- Advices used: 2
- Penalty due to advices: None (2 <= 2 limit)
- Total percent: 100.00 %
- Early submission bonus: 0.50
- Total points: 1.00 * (5.00 + 0.50) = 5.50

	Total	Average	Maximum	Function name
SW metrics:				
Functions:	5	--	-- --	
Lines of code:	72	14.40 ± 10.61	35	main
Cyclomatic complexity:	18	3.60 ± 1.02	5	main

3

2022-11-07 19:25:44

Download

Submission status:

Evaluated

Evaluation:

5.5000

• Evaluator: computer

◦ Program compiled

◦ Test 'Basic test with example input data': success

▪ result: 100.00 %, required: 100.00 %

▪ Max. run time: 0.010 s (limit: 1.000 s)

▪ Total run time: 0.035 s

▪ Mandatory test success, evaluation: 100.00 %

◦ Test 'Borderline test': success

▪ result: 100.00 %, required: 50.00 %

▪ Max. run time: 0.005 s (limit: 1.000 s)

▪ Total run time: 0.054 s

▪ Optional test success, evaluation: 100.00 %

◦ Test 'Invalid input test': success

▪ result: 100.00 %, required: 50.00 %

▪ Max. run time: 0.005 s (limit: 1.000 s)

▪ Total run time: 0.025 s

▪ Optional test success, evaluation: 100.00 %

◦ Test 'Random test': success

▪ result: 100.00 %, required: 50.00 %

▪ Max. run time: 0.029 s (limit: 2.000 s)

▪ Total run time: 0.121 s

▪ Optional test success, evaluation: 100.00 %

◦ Test 'Random test + mem debugger': success

▪ result: 100.00 %, required: 50.00 %

▪ Max. run time: 0.022 s (limit: 2.000 s)

▪ Total run time: 0.117 s

▪ Optional test success, evaluation: 100.00 %

◦ Test 'Speed test I': success

▪ result: 100.00 %, required: 50.00 %

▪ Max. run time: 0.551 s (limit: 2.000 s)

▪ Total run time: 1.103 s

▪ Optional test success, evaluation: 100.00 %

◦ Test 'Speed test II': Abnormal program termination (Time limit exceeded)

▪ Program was killed after: 2.006 s (limit: 2.000 s)

▪ Bonus test - failed, evaluation: No bonus awarded

- Time limit exceeded [**Unlock advice (2.00 KiB, incomplete data)**]
- Overall ratio: 100.00 % (= 1.00 * 1.00 * 1.00 * 1.00 * 1.00 * 1.00)
- Advices used: 2
- Penalty due to advices: None (2 ≤ 2 limit)
- Total percent: 100.00 %
- Early submission bonus: 0.50
- Total points: 1.00 * (5.00 + 0.50) = 5.50

		Total	Average	Maximum	Function name
SW metrics:	Functions:	5	--	-- --	
	Lines of code:	75	15.00 ± 11.78	38	main
	Cyclomatic complexity:	19	3.80 ± 1.33	6	main

2

2022-11-07 19:15:52

[Download](#)**Submission status:** Evaluated**Evaluation:** 0.3438

- **Evaluator: computer**
 - Program compiled
 - Test 'Basic test with example input data': success
 - result: 100.00 %, required: 100.00 %
 - Max. run time: 0.005 s (limit: 1.000 s)
 - Total run time: 0.029 s
 - Mandatory test success, evaluation: 100.00 %
 - Test 'Borderline test': success
 - result: 100.00 %, required: 50.00 %
 - Max. run time: 0.006 s (limit: 1.000 s)
 - Total run time: 0.056 s
 - Optional test success, evaluation: 100.00 %
 - Test 'Invalid input test': Abnormal program termination (Segmentation fault/Bus error/Memory limit exceeded/Stack limit exceeded)
 - Max. run time: 0.762 s (limit: 1.000 s)
 - Total run time: 0.782 s
 - Optional test failed, evaluation: 50.00 %
 - Segmentation fault [**Unlock advice (2.00 KiB, incomplete data)**]
 - Test 'Random test': Not tested
 - Optional test failed, evaluation: 50.00 %
 - Test 'Random test + mem debugger': Not tested
 - Optional test failed, evaluation: 50.00 %
 - Test 'Speed test I': Not tested
 - Optional test failed, evaluation: 50.00 %
 - Test 'Speed test II': Not tested
 - Bonus test - failed, evaluation: No bonus awarded
 - Overall ratio: 6.25 % (= 1.00 * 1.00 * 0.50 * 0.50 * 0.50 * 0.50)
- Advices used: 2
- Penalty due to advices: None (2 ≤ 2 limit)
- Total percent: 6.25 %
- Early submission bonus: 0.50
- Total points: 0.06 * (5.00 + 0.50) = 0.34

		Total	Average	Maximum	Function name
SW metrics:	Functions:	5	--	-- --	
	Lines of code:	68	13.60 ± 9.07	31	main
	Cyclomatic complexity:	19	3.80 ± 1.33	6	main

1

2022-11-07 18:55:52

Download

Submission status:

Evaluated

Evaluation:

0.3438

• Evaluator: computer

◦ Program compiled

◦ Test 'Basic test with example input data': success

▪ result: 100.00 %, required: 100.00 %

▪ Max. run time: 0.006 s (limit: 1.000 s)

▪ Total run time: 0.032 s

▪ Mandatory test success, evaluation: 100.00 %

◦ Test 'Borderline test': success

▪ result: 100.00 %, required: 50.00 %

▪ Max. run time: 0.005 s (limit: 1.000 s)

▪ Total run time: 0.056 s

▪ Optional test success, evaluation: 100.00 %

◦ Test 'Invalid input test': Abnormal program termination (Segmentation fault/Bus error/Memory limit exceeded/Stack limit exceeded)

▪ Max. run time: 0.765 s (limit: 1.000 s)

▪ Total run time: 0.785 s

▪ Optional test failed, evaluation: 50.00 %

▪ ☐ Failed (invalid output)

▪ Failed (invalid output) [Unlock advice (72 B)]

▪ ☐ Seggmentation fault

◦ Test 'Random test': Not tested

▪ Optional test failed, evaluation: 50.00 %

◦ Test 'Random test + mem debugger': Not tested

▪ Optional test failed, evaluation: 50.00 %

◦ Test 'Speed test I': Not tested

▪ Optional test failed, evaluation: 50.00 %

◦ Test 'Speed test II': Not tested

▪ Bonus test - failed, evaluation: No bonus awarded

◦ Overall ratio: 6.25 % (= 1.00 * 1.00 * 0.50 * 0.50 * 0.50 * 0.50)

• Total percent: 6.25 %

• Early submission bonus: 0.50

• Total points: 0.06 * (5.00 + 0.50) = 0.34

SW metrics:

Functions:

Lines of code:

Cyclomatic complexity:

Total

Average

Maximum

Function name

5

--

-- --

63

12.60 ± 7.17

26

main

18

3.60 ± 1.02

5

main