

vbokhanov /  
Assembler[Code](#) [Issues](#) [Pull requests](#) [Actions](#) [Projects](#) [Security](#) [Insights](#)[Assembler](#) / [Readme.md](#)vbokhanov [add pytest tests](#)

7da618d · 5 hours ago



36 lines (20 loc) · 1.27 KB

# Assembler

## Описание главного теста

Есть 2 массива чисел  $A = 32, 64, 128, 256, 512$ ,  $B = 1, 2, 3, 4, 5$ , хранящиеся подряд в ячейках памяти с номерами с 100 по 110. К массиву  $A$  применяется операция  $A[i] = A[i] \gg B[i]$ . Конечное ожидаемое состояние массивов:  $A = 16, 16, 16, 16, 16$ ,

[Assembler](#) / [Readme.md](#)[↑ Top](#)

Preview

Code

Blame

Raw



```
pytest test_solution.py -vvv
```

```
(3.12.5) user@user-System-Product-Name:~/mirea/assembler$ pytest test_solution.py -vvv
===== test session starts =====
platform linux -- Python 3.12.5, pytest-8.3.2, pluggy-1.5.0 -- /home/user/.pyenv/versions/3.12.5/bin/python3.12
cachedir: .pytest_cache
rootdir: /home/user/mirea/assembler
plugins: cov-6.0.0
collected 5 items

test_solution.py::test_load[op0] PASSED [ 20%]
test_solution.py::test_load[op1] PASSED [ 40%]
test_solution.py::test_load[op2] PASSED [ 60%]
test_solution.py::test_load[op3] PASSED [ 80%]
test_solution.py::test_program PASSED [100%]

===== 5 passed in 0.45s =====
(3.12.5) user@user-System-Product-Name:~/mirea/assembler$ git status
On branch main
```

## 🔗 Запуск главного теста и результаты

```
python assembler.py program.asm program.bin program_log.yaml
```

```
python interpreter.py program.bin result.yaml 100 110
```

```

• (3.12.5) user@user-System-Product-Name:~/mirea/assembler$ python assembler.py program.asm program.bin program_log.yaml
• (3.12.5) user@user-System-Product-Name:~/mirea/assembler$ python interpreter.py program.bin result.yaml 100 110
• (3.12.5) user@user-System-Product-Name:~/mirea/assembler$ cat program_log.yaml
- address: 0
  command: LOAD
  const: 32
  opcode: 2
- address: 1
  command: LOAD
  const: 64
  opcode: 2
- address: 2
  command: LOAD
  const: 128
  opcode: 2
- address: 3
  command: LOAD
  const: 256
  opcode: 2
- address: 4
  command: LOAD
  const: 512
  opcode: 2
- addr1: 0
  addr2: 100
  command: WRITE
  opcode: 5
- addr1: 1
  addr2: 101
  command: WRITE

```

```

• (3.12.5) user@user-System-Product-Name:~/mirea/assembler$ cat result.yaml
100: 16
101: 16
102: 16
103: 16
104: 16
105: 1
106: 2
107: 3
108: 4
109: 5
○ (3.12.5) user@user-System-Product-Name:~/mirea/assembler$ █

```

## Тесты на получаемую последовательность байт операций LOAD READ WRITE SHIFT

Можно убедиться, что полученные значения совпадают с указанными в условии задачи

```

• (3.12.5) user@user-System-Product-Name:~/mirea/assembler$ python assembler.py test_load.asm test_load.bin test_load_log.yaml
• (3.12.5) user@user-System-Product-Name:~/mirea/assembler$ hexdump -C test_load.bin
00000000 a2 2c 00 00 00 00 00 00 00 00 00 00 00 00 00 00 |.....|
00000010 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 |.....|
00000020 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 |.....|
00000028
○ (3.12.5) user@user-System-Product-Name:~/mirea/assembler$ █

```

```

• (3.12.5) user@user-System-Product-Name:~/mirea/assembler$ python assembler.py test_read.asm test_read.bin test_read_log.yaml
• (3.12.5) user@user-System-Product-Name:~/mirea/assembler$ hexdump -C test_read.bin
00000000 90 bb 0b 00 00 00 00 00 00 00 00 00 00 00 00 00 |.....|
00000010 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 |.....|
00000018
○ (3.12.5) user@user-System-Product-Name:~/mirea/assembler$ █

```

```
• (3.12.5) user@user-System-Product-Name:~/mirea/assembler$ python assembler.py test_write.asm test_write.bin test_write_log.yaml
• (3.12.5) user@user-System-Product-Name:~/mirea/assembler$ hexdump -C test_write.bin
00000000  45 56 01 00 00 00 00 00  00 00 00 00 00 00 00 00  |EV.....|
00000010  00 00 00 00 00 00 00 00  00 00 00 00 00 00 00 00  |.....|
00000020
○ (3.12.5) user@user-System-Product-Name:~/mirea/assembler$ █
```

```
• (3.12.5) user@user-System-Product-Name:~/mirea/assembler$ python assembler.py test_shift.asm test_shift.bin test_shift_log.yaml
• (3.12.5) user@user-System-Product-Name:~/mirea/assembler$ hexdump -C test_shift.bin
00000000  d6 b2 01 00 00 00 00 00  00 00 00 00 00 00 00 00  |.....|
00000010  00 00 00 00 00 00 00 00  00 00 00 00 00 00 00 00  |.....|
00000020
○ (3.12.5) user@user-System-Product-Name:~/mirea/assembler$ █
```