

Paragraph 1, 2

```

1  main:
2  mv      t0, zero      # Псевдо - R
3  li,     t1, 1         # Псевдо - I
4
5  li      a7, 5         # Псевдо - I
6  ecall                   # I
7  mv      t3, a0        # Псевдо - R
8  fib:
9  beqz    t3, finish    # Псевдо - SB
10 add     t2, t1, t0     # R
11 mv      t0, t1        # Псевдо - R
12 mv      t1, t2        # Псевдо - R
13 addi    t3, t3, -1     # I
14 j       fib           # Псевдо - UJ
15 finish:
16 li      a7, 1         # Псевдо - I
17 mv      a0, t0        # Псевдо - R
18 ecall                   # I

```

Paragraph 3

The screenshot shows a debugger interface with the following components:

- Text Segment:** A table showing assembly instructions with their addresses, codes, and sources.

Bkpt	Address	Code	Basic	Source
	0x00400000	0x000002b3	add x5,x0,x0	2: mv t0, zero # Псевдо - R
	0x00400004	0x00100313	addi x6,x0,1	3: li, t1, 1 # Псевдо - I
	0x00400008	0x00500893	addi x17,x0,5	5: li a7, 5 # Псевдо - I
	0x0040000c	0x00000073	ecall	6: ecall # I
	0x00400010	0x00a00e33	add x28,x0,x10	7: mv t3, a0 # Псевдо - R
	0x00400014	0x00000c63	beq x28,x0,0x00000018	9: beqz t3, finish # Псевдо - SB
	0x00400018	0x005303b3	add x7,x6,x5	10: add t2, t1, t0 # R
	0x0040001c	0x006002b3	add x5,x0,x6	11: mv t0, t1 # Псевдо - R
	0x00400020	0x00700333	add x6,x0,x7	12: mv t1, t2 # Псевдо - R
	0x00400024	0xfffe0e13	addi x28,x28,0xffffffff	13: addi t3, t3, -1 # I
- Data Segment:** A table showing memory addresses and their values at different offsets.

Address	Value (+0)	Value (+4)	Value (+8)	Value (+c)	Value (+10)	Value (+14)	Value (+18)	Value (+1c)
0x10010000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000
0x10010020	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000
0x10010040	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000
0x10010060	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000
0x10010080	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000
0x100100a0	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000
0x100100c0	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000
- Registers:** A table showing the state of various registers.

Name	Number	Value
ustatus	0	0x00000000
fflags	1	0x00000000
frm	2	0x00000000
fcsr	3	0x00000000
uie	4	0x00000000
utvec	5	0x00000000
uscratch	64	0x00000000
uepc	65	0x00000000
ucause	66	0x00000000
utval	67	0x00000000
uip	68	0x00000000
cycle	3072	0x00000001
time	3073	0xfad33784
instret	3074	0x00000001
cycleh	3200	0x00000000
timeh	3201	0x00000000
instreth	3202	0x00000000
- Messages:** A log showing the program's execution status: "program is finished running (dropped off bottom)".

Additional task

java -jar rars_3897cfa.jar a dump 0x00400000-0x00400034 SegmentWindow code.txt riscv1.asm

Address	Code	Basic	Line	Source	
0x00400000	0x000002b3	add x5,x0,x0	2	mv t0, zero	# Псевдо – R
0x00400004	0x00100313	addi x6,x0,1	3	li, t1, 1	# Псевдо – I
0x00400008	0x00500893	addi x17,x0,5	5	li a7, 5	# Псевдо – I
0x0040000c	0x00000073	ecall	6	ecall	# I
0x00400010	0x00a00e33	add x28,x0,x10	7	mv t3, a0	# Псевдо – R
0x00400014	0x000e0c63	beq x28,x0,0x00000018	9	beqz t3, finish	# Псевдо – SB
0x00400018	0x005303b3	add x7,x6,x5	10	add t2, t1, t0	# R
0x0040001c	0x006002b3	add x5,x0,x6	11	mv t0, t1	# Псевдо – R
0x00400020	0x00700333	add x6,x0,x7	12	mv t1, t2	# Псевдо – R
0x00400024	0xfffe0e13	addi x28,x28,0xffffffff	13	addi t3, t3, -1	# I
0x00400028	0xfedff06f	jal x0,0xffffffffec	14	j fib	# Псевдо – UJ
0x0040002c	0x00100893	addi x17,x0,1	16	li a7, 1	# Псевдо – I
0x00400030	0x00500533	add x10,x0,x5	17	mv a0, t0	# Псевдо – R