

SOI LAB 2

Algorytm Szeregowania

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Przedmiot:
SOI, semestr: 21Z

Numer Albumu:
310765

Parametry grupy zmieniane programem ./setParam {która grupa} {na jaką}

Są wykonywane 3 testy:

1. Parametry grupy: A = 4, B = 2, C = 1 (test uruchomiony ./run)

t1:

```
PROC: pid: 49, param: 4, group 0
PROC: pid: 50, param: 2, group 1

--pid --pc- ---sp- flag -user --sys-- -text- -data- -size- -recv- command
(-10) e521 b2c0 0      2      0      2K      61K      111K      TTY
( -9) e521 b688 4      0      0      2K      61K      111K ANY    (C1)
( -8) e521 baa8 4     20      0      2K      61K      111K ANY    at
( -7) e521 bcbc 4      0      0      2K      61K      111K CLOCK  SYN_AL
( -6)  da8 bd24 0      0     7206      2K      61K      111K      IDLE
( -5) e521 c2cc 4      0      0      2K      61K      111K ANY    FLOPPY
( -4) e521 c4d0 4      0      0      2K      61K      111K ANY    MEMORY
( -3) e521 c710 4      1      0      2K      61K      111K ANY    CLOCK
( -2) e521 c910 4     15      0      2K      61K      111K ANY    SYS
( -1)   0  c92c 0     7208      0      2K      61K      111K      HARDWAR
(  0) 3551 7fc0 4      6      0    1024K    1039K      47K ANY    MM
(  1) 701d 1b7c4 4     117      0    1071K    1100K    139K ANY    FS
   1  17a5 1310 4      1      4    1210K    1217K     12K MM     INIT
  23  eba1 f5d4 0      3     11     221K     284K    125K      sh
  24  1671 41b8 4      0      2     181K     204K     23K FS     getty
  19   539 12fc 4      1      0     367K     369K      7K MM     update
  20 4019 9b04 4      0      1     374K     397K     62K MM     cron
  48  eba1 f578 0      0      2     221K     436K    125K      sh
  49   125 206a8 0     83      1    1222K    1228K    136K      main
  50   11c 206a8 0     13      1    1222K    1358K    136K      main
#
```

t2:

```
--pid --pc- ---sp- flag -user --sys-- -text- -data- -size- -recv- command
(-10) e521 b2c0 0 2 0 2K 61K 111K TTY
(-9) e521 b688 4 0 0 2K 61K 111K ANY (C1)
(-8) e521 baa8 4 20 0 2K 61K 111K ANY at
(-7) e521 bcbc 4 0 0 2K 61K 111K CLOCK SYN_AL
(-6) da8 bd24 0 0 7206 2K 61K 111K IDLE
(-5) e521 c2cc 4 0 0 2K 61K 111K ANY FLOPPY
(-4) e521 c4d0 4 0 0 2K 61K 111K ANY MEMORY
(-3) e521 c710 4 1 0 2K 61K 111K ANY CLOCK
(-2) e521 c910 4 15 0 2K 61K 111K ANY SYS
(-1) 0 c92c 0 7208 0 2K 61K 111K HARDWAR
(0) 3551 7fc0 4 6 0 1024K 1039K 47K ANY MM
(1) 701d 1b7c4 4 117 0 1071K 1100K 139K ANY FS
1 17a5 1310 4 1 4 1210K 1217K 12K MM INIT
23 eba1 f638 4 3 11 221K 284K 125K FS sh
24 1671 41b8 4 0 2 181K 204K 23K FS getty
19 539 12fc 4 1 0 367K 369K 7K MM update
20 4019 9b04 4 0 1 374K 397K 62K MM cron
49 125 206a8 0 1046 1 1222K 1228K 136K main
50 11c 206a8 0 515 1 1222K 1358K 136K main
$49 ENDED
$50 ENDED
```

Wynik:

PROC 49: $tA = tA2 - tA1 = 1046 - 83 = 963$

PROC 50: $tB = tB2 - tB1 = 515 - 13 = 502$

$tA / tB = 1.91 \approx 2 = A/B$

2. Parametry grupy: A = 2, B = 10, C = 1 (test uruchomiony ./run)

t1:

```
PROC: pid: 57, param: 2, group 0
PROC: pid: 58, param: 10, group 1
#
--pid --pc- ---sp- flag -user --sys-- -text- -data- -size- -recv- command
(-10) e521 b2c0 0 2 0 2K 61K 111K TTY
(-9) e521 b688 4 0 0 2K 61K 111K ANY (C1)
(-8) e521 baa8 4 20 0 2K 61K 111K ANY at
(-7) e521 bcbc 4 0 0 2K 61K 111K CLOCK SYN_AL
(-6) da8 bd24 0 0 38141 2K 61K 111K IDLE
(-5) e521 c2cc 4 0 0 2K 61K 111K ANY FLOPPY
(-4) e521 c4d0 4 0 0 2K 61K 111K ANY MEMORY
(-3) e521 c710 4 1 0 2K 61K 111K ANY CLOCK
(-2) e521 c910 4 15 0 2K 61K 111K ANY SYS
(-1) 0 c92c 0 38146 0 2K 61K 111K HARDWAR
(0) 3551 7fc0 4 9 0 1024K 1039K 47K ANY MM
(1) 701d 1b7c4 4 119 0 1071K 1100K 139K ANY FS
1 17a5 1310 4 1 4 1210K 1217K 12K MM INIT
23 eba1 f638 4 3 11 221K 284K 125K FS sh
24 1671 41b8 4 0 2 181K 204K 23K FS getty
19 539 12fc 4 1 0 367K 369K 7K MM update
20 4019 9b04 4 0 1 374K 397K 62K MM cron
57 125 206a8 0 54 1 1222K 1228K 136K main
58 125 206a8 0 140 1 1222K 1358K 136K main
```

t2:

```
#
--pid--pc- ---sp- flag -user --sys-- -text- -data- -size- -recv- command
(-10) e521 b2c0 0 2 0 2K 61K 111K TTY
(-9) e521 b688 4 0 0 2K 61K 111K ANY (C1)
(-8) e521 baa8 4 20 0 2K 61K 111K ANY at
(-7) e521 bcbc 4 0 0 2K 61K 111K CLOCK SYN_AL
(-6) da8 bd24 0 0 38141 2K 61K 111K IDLE
(-5) e521 c2cc 4 0 0 2K 61K 111K ANY FLOPPY
(-4) e521 c4d0 4 0 0 2K 61K 111K ANY MEMORY
(-3) e521 c710 4 1 0 2K 61K 111K ANY CLOCK
(-2) e521 c910 4 15 0 2K 61K 111K ANY SYS
(-1) 0 c92c 0 38146 0 2K 61K 111K HARDWAR
(0) 3551 7fc0 4 9 0 1024K 1039K 47K ANY MM
(1) 701d 1b7c4 4 119 0 1071K 1100K 139K ANY FS
1 17a5 1310 4 1 4 1210K 1217K 12K MM INIT
23 eba1 f638 4 3 11 221K 284K 125K FS sh
24 1671 41b8 4 0 2 181K 204K 23K FS getty
19 539 12fc 4 1 0 367K 369K 7K MM update
20 4019 9b04 4 0 1 374K 397K 62K MM cron
57 11c 206a8 0 216 1 1222K 1228K 136K main
58 125 206a8 0 971 1 1222K 1358K 136K main
```

Wynik:

PROC 57: $t_A = t_{A2} - t_{A1} = 971 - 140 = 831$

PROC 58: $t_B = t_{B2} - t_{B1} = 216 - 54 = 162$

$t_A / t_B = 5.12 \approx 5 = A / B$