## Operációs rendszerek Bsc 11. Gyak.

2022. 05. 02.

## Készítette:

Pogonyi Ábel Kürt Bsc Programtervező informatika TR6FKP

| FIFO 7 1.lap 7 2.lap |     | 5   |     |     |     |     |     |         | Dupin.     | atkozás |     |     |     |   |     |     |   |     |     |
|----------------------|-----|-----|-----|-----|-----|-----|-----|---------|------------|---------|-----|-----|-----|---|-----|-----|---|-----|-----|
| 2.lap                |     |     | 4   | 6   | 7   | 3   | 2   | 6       | 7          | 6       | 5   | 1   | 2   | 5 | 6   | 7   | 6 | 5   | 2   |
|                      | 7   | 7   | 4   |     | 4   | 4   | 2   | 2       | 2          |         | 5   | 5   | 5   |   | 6   | 6   |   | 6   | 2   |
|                      | 6   | 6   | 6   |     | 7   | 7   | 7   | 6       | 6          |         | 6   | 1   | 1   |   | 1   | 7   |   | 7   | 7   |
| 3.lap                |     | 5   | 5   |     | 5   | 3   | 3   | 3       | 7          |         | 7   | 7   | 2   |   | 2   | 2   |   | 5   | 5   |
| FIFO 7               | 7 6 | 5   | 4   |     | 7   | 3   | 2   | 6       | 7          |         | 5   | 1   | 2   |   | 6   | 7   |   | 5   | 2   |
| aphiba: 16           |     |     |     |     |     |     |     |         |            |         |     |     |     |   |     |     |   |     |     |
|                      |     |     |     |     |     |     |     | First I | n, First ( | Out     |     |     |     |   |     |     |   |     |     |
|                      |     |     |     |     |     |     |     |         |            |         |     |     |     |   |     |     |   |     |     |
|                      |     |     |     |     |     |     |     |         | Laphiv     | atkozás |     |     |     |   |     |     |   |     |     |
| LRU 7                |     | 5   | 4   | 6   | 7   | 3   | 2   | 6       | 7          | 6       | 5   | 1   | 2   | 5 | 6   | 7   | 6 | 5   | 2   |
| 1.lap 7              | 7   | 7   | 4   |     | 4   | 3   | 3   | 3       | 7          |         | 7   | 1   | 1   |   | 6   | 6   |   |     | 6   |
| 2.lap                | 6   | 6   | 6   |     | 6   | 6   | 2   | 2       | 2          |         | 5   | 5   | 5   |   | 5   | 5   |   |     | 5   |
| 3.lap                |     | 5   | 5   |     | 7   | 7   | 7   | 6       | 6          |         | 6   | 6   | 2   |   | 2   | 7   |   |     | 2   |
| aphiba: 15           |     |     |     |     |     |     |     |         |            |         |     |     |     |   |     |     |   |     |     |
|                      |     |     |     |     |     |     |     | Last Re | ecently U  | sed     |     |     |     |   |     |     |   |     |     |
|                      |     |     |     |     |     |     |     |         |            |         |     |     |     |   |     |     |   |     |     |
|                      |     |     |     |     |     |     |     |         | Laphiv     | atkozás |     |     |     |   |     |     |   |     |     |
| OPT 7                | 6   | 5   | 4   | 6   | 7   | 3   | 2   | 6       | 7          | 6       | 5   | 1   | 2   | 5 | 6   | 7   | 6 | 5   | 2   |
| 1.lap 7              | 7   | 7   | 7   |     |     | 7   | 7   |         |            |         | 5   | 5   |     |   | 5   | 5   |   |     | 5   |
| 2.lap                | 6   | 6   | 6   |     |     | 6   | 6   |         |            |         | 6   | 1   |     |   | 6   | 6   |   |     | 6   |
| 3.lap                |     | 5   | 4   |     |     | 3   | 2   |         |            |         | 2   | 2   |     |   | 2   | 7   |   |     | 2   |
| aphiba: 11           |     |     |     |     |     |     |     |         |            |         |     |     |     |   |     |     |   |     |     |
|                      |     |     |     |     |     |     |     | O       | otimális   |         |     |     |     |   |     |     |   |     |     |
|                      |     |     |     |     |     |     |     |         | Loobin     | atkozás |     |     |     |   |     |     |   |     |     |
| SC 7                 | 7 6 | 5   | 4   | 6   | 7   | 3   | 2   | 6       | 7          | 6       | 5   | 1   | 2   | 5 | 6   | 7   | 6 | 5   | 2   |
| 1.lap 7.             |     | 7,1 | 4.1 |     | 4.1 | 4.1 | 2.1 | 2.1     | 2.1        | 3       | 5.1 | 5.1 | 5.1 |   | 6.1 | 6.1 |   | 6.1 | 2.1 |
| 2.lap                | 6.1 | 6.1 | 6   | 6.1 | 6   | 3.1 | 3   | 3       | 7.1        |         | 7   | 7   | 2.1 |   | 2   | 2   |   | 5.1 | 5   |
| 3.lap                | 0.1 | 5.1 | 5   | 0.1 | 7.1 | 7.1 | 7   | 6.1     | 6.1        |         | 6   | 1.1 | 1.1 |   | 1   | 7.1 |   | 7.1 | 7   |
| aphiba: 16           |     | 3.1 | ,   |     | 7.1 | 7.1 | /   | 0.1     | 0.1        |         | U   | 1.1 | 1.1 |   | 1   | 7.1 |   | 7.1 |     |

Ez a három memória keretes volt, sajnos úgy jöttek egymás után a számok, hogy az optimális kivételével szinte egyik se volt jó, így hasonló eredmények jöttek ki.

|                     |          |     |     |     |   |   |     |     |             | Laphiv     | atkozás |     |     |     |   |     |     |     |     |   |
|---------------------|----------|-----|-----|-----|---|---|-----|-----|-------------|------------|---------|-----|-----|-----|---|-----|-----|-----|-----|---|
| FIFO                | 7        | 6   | 5   | 4   | 6 | 7 | 3   | 2   | 6           | 7          | 6       | 5   | 1   | 2   | 5 | 6   | 7   | 6   | 5   | 2 |
| 1.lap               | 7        | 7   | 7   | 7   |   |   | 3   | 3   | 3           | 3          |         | 5   | 5   | 5   |   | 5   | 7   |     | 7   |   |
| 2.1ap               |          | 6   | 6   | 6   |   |   | 6   | 2   | 2           | 2          |         | 2   | 1   | 1   |   | 1   | 1   |     | 5   |   |
| 3.1ap               |          |     | 5   | 5   |   |   | 5   | 5   | 6           | 6          |         | 6   | 6   | 2   |   | 2   | 2   |     | 2   |   |
| 4.1ap               |          |     |     | 4   |   |   | 4   | 4   | 4           | 7          |         | 7   | 7   | 7   |   | 6   | 6   |     | 6   |   |
| FIFO                | 7        | 6   | 5   | 4   | 3 | 2 | 6   | 7   | 5           | 1          | 2       | 6   | 7   | 5   |   |     |     |     |     |   |
| Laphiba: 14         |          |     |     |     |   |   |     |     |             |            |         |     |     |     |   |     |     |     |     |   |
|                     |          |     |     |     |   |   |     | I   | First In, l | First Out  |         |     |     |     |   |     |     |     |     |   |
|                     |          |     |     |     |   |   |     |     |             |            |         |     |     |     |   |     |     |     |     |   |
|                     |          |     |     |     |   |   |     |     |             |            | atkozás |     |     |     |   |     |     |     |     |   |
| LRU                 | 7        | 6   | 5   | 4   | 6 | 7 | 3   | 2   | 6           | 7          | 6       | 5   | 1   | 2   | 5 | 6   | 7   | 6   | 5   | 2 |
| 1.lap               | 7        | 7   | 7   | 7   |   |   | 7   | 7   |             |            |         | 7   | 7   | 2   |   |     | 2   |     |     |   |
| 2.lap               |          | 6   | 6   | 6   |   |   | 6   | 6   |             |            |         | 6   | 6   | 6   |   |     | 6   |     |     |   |
| 3.1ap               |          |     | 5   | 5   |   |   | 3   | 3   |             |            |         | 5   | 5   | 5   |   |     | 5   |     |     |   |
| 4.1ap               |          |     |     | 4   |   |   | 4   | 2   |             |            |         | 2   | 1   | 1   |   |     | 7   |     |     |   |
| Laphiba: 10         |          |     |     |     |   |   |     |     |             |            |         |     |     |     |   |     |     |     |     |   |
|                     |          |     |     |     |   |   |     | I   | ast rece    | ntly used  |         |     |     |     |   |     |     |     |     |   |
|                     |          |     |     |     |   |   |     |     |             | Tautio     | atkozás |     |     |     |   |     |     |     |     |   |
| OPT                 | 7        | 6   | 5   | 4   | 6 | 7 | 3   | 2   | 6           | Lapmy<br>7 | 6       | 5   | 1   | 2   | 5 | 6   | 7   | 6   | 5   | 2 |
|                     | 7        | 7   | 7   | 7   | 0 | - | 7   | 7   | 0           |            | 0       |     | 1   |     |   | 0   | 7   | 0   |     |   |
| 1.lap               |          | 6   | 6   | 6   |   |   | 6   | 6   |             |            |         |     | 6   |     |   |     | 6   |     |     |   |
| 2.lap               | -        | 0   | 5   |     |   |   | 5   |     |             |            |         |     |     |     |   |     |     |     |     |   |
| 3.lap               | L        |     | 5   | 5   |   |   |     | 5   |             |            |         |     | 5   |     |   |     | 5   |     |     |   |
| 4.lap<br>Laphiba: 8 | -        |     |     | 4   |   |   | 3   | 2   |             |            |         |     | 2   |     |   |     |     |     |     |   |
| Lapniba: 8          | <u> </u> |     |     |     |   |   |     |     | optin       | nétin      |         |     |     |     |   |     |     |     |     |   |
|                     |          |     |     |     |   |   |     |     | орш         | ians       |         |     |     |     |   |     |     |     |     |   |
|                     |          |     |     |     |   |   |     |     |             | Laphiv     | atkozás |     |     |     |   |     |     |     |     |   |
| SC                  | 7        | 6   | 5   | 4   | 6 | 7 | 3   | 2   | 6           | 7          | 6       | 5   | 1   | 2   | 5 | 6   | 7   | 6   | 5   | 2 |
| 1.lap               | 7.1      | 7.1 | 7.1 | 7.1 |   |   | 3.1 | 3.1 | 3.1         | 3.1        |         | 5.1 | 5.1 | 5.1 |   | 5.1 | 7.1 |     | 7.1 |   |
| 2.1ap               |          | 6.1 | 6.1 | 6.1 |   |   | 6   | 2.1 | 2.1         | 2.1        |         | 2   | 1.1 | 1.1 |   | 1.1 | 1   |     | 5.1 |   |
| 3.1ap               |          |     | 5.1 | 5.1 |   |   | 5   | 5   | 6.1         | 6.1        |         | 6   | 6   | 2.1 |   | 2.1 | 2   |     | 2   |   |
| 4.lap               |          |     |     | 4.1 |   |   | 4   | 4   | 4           | 7.1        |         | 7   | 7   | 7   |   | 6.1 | 6   | 6.1 | 6.1 |   |
| Laphiba: 14         |          |     |     |     |   |   |     |     |             |            |         |     |     |     |   |     |     |     |     |   |
|                     |          |     |     |     |   |   |     |     | Másodi      | k esélv    |         |     |     |     |   |     |     |     |     |   |

Ez a 4 memória keretes. A SC és FIFO nagyon hasonló volt, lehet csak én rontottam el valamit, de szinte ugyan az. Viszont itt a LRU sokat javult.

## 2.

|               | Laphivatkozás |   |   |   |   |   |   |   |         |             |         |   |   |   |   |   |   |          |   |   |
|---------------|---------------|---|---|---|---|---|---|---|---------|-------------|---------|---|---|---|---|---|---|----------|---|---|
| FIFO          | 7             | 0 | 1 | 2 | 0 | 3 | 0 | 4 | 2       | 3           | 0       | 3 | 2 | 1 | 2 | 0 | 1 | 7        | 0 | 1 |
| 1.lap         | 7             | 7 | 7 | 2 |   | 2 | 2 | 4 | 4       | 4           | 0       |   |   | 0 | 0 |   |   | 7        | 7 | 7 |
| 2.lap         |               | 0 | 0 | 0 |   | 3 | 3 | 3 | 2       | 2           | 2       |   |   | 1 | 1 |   |   | 1        | 0 | 0 |
| 3.lap         |               |   | 1 | 1 |   | 1 | 0 | 0 | 0       | 3           | 3       |   |   | 3 | 2 |   |   | 2        | 2 | 1 |
| FIFO          | 7             | 0 | 1 | 2 | 3 | 0 | 4 | 2 | 3       | 0           | 1       | 2 | 7 | 0 | 1 |   |   |          |   |   |
| Laphiba: 15   |               |   |   |   |   |   |   |   |         |             |         |   |   |   |   |   |   |          |   |   |
|               |               |   |   |   |   |   |   |   | First l | in, First ( | Out     |   |   |   |   |   |   |          |   |   |
|               |               |   |   |   |   |   |   |   |         |             |         |   |   |   |   |   |   |          |   |   |
| _             | Laphivatkozás |   |   |   |   |   |   |   |         |             |         |   |   |   |   |   |   |          |   |   |
| OPT           | 7             | 0 | 1 | 2 | 0 | 3 | 0 | 4 | 2       | 3           | 0       | 3 | 2 | 1 | 2 | 0 | 1 | 7        | 0 | 1 |
| 1.lap         | 7             | 7 | 7 | 2 |   | 2 |   | 2 |         |             | 2       |   |   | 2 |   |   |   | 7        |   |   |
| 2.lap         |               | 0 | 0 | 0 |   | 0 |   | 4 |         |             | 0       |   |   | 0 |   |   |   | 0        |   |   |
| 3.lap         |               |   | 1 | 1 |   | 3 |   | 3 |         |             | 3       |   |   | 1 |   |   |   | 1        |   |   |
| Laphiba: 9    |               |   |   |   |   |   |   |   |         |             |         |   |   |   |   |   |   |          |   |   |
|               |               |   |   |   |   |   |   |   | 0       | ptimális    |         |   |   |   |   |   |   |          |   |   |
|               |               |   |   |   |   |   |   |   |         | Lambir      | atkozás |   |   |   |   |   |   |          |   |   |
| LRU           | 7             | 0 | 1 | 2 | 0 | 3 | 0 | 4 | 2       | 3           | 0       | 3 | 2 | 1 | 2 | 0 | 1 | 7        | 0 | 1 |
| 1.lap         | 7             | 7 | 7 | 2 | - | 2 | - | 4 | 4       | 4           | 0       | - |   | 1 |   | 1 |   | 1        |   | _ |
| 2.lap         |               | 0 | 0 | 0 |   | 0 |   | 0 | 0       | 3           | 3       |   |   | 3 |   | 0 |   | 0        |   |   |
| 3.lap         |               |   | 1 | 1 |   | 3 |   | 3 | 2       | 2           | 2       |   |   | 2 |   | 2 |   | 7        |   |   |
| Laphiba: 14   |               |   |   | - |   |   |   |   |         |             |         |   |   |   |   |   |   | <u> </u> |   |   |
| 2.1011.04. 14 |               |   |   |   |   |   |   |   | Lastn   | ecently u   | eed     |   |   |   |   |   |   |          |   |   |

Itt is 3 memória keret volt, úgy látszik ennyi nagyon kevés hogy sok eltérés legyen különböző metódusok közötti eredményben.