**Systemprogrammierung Blatt3 Theorie**

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Quellen:

Vorlesungsfolien zum Thema Scheduling (von ISIS)

Anmerkung: Wenn in den Warteschlangen (Queues bzw. Stack) ein Prozess über einem anderen steht, bedeutet dies, dass der obere Prozess vor dem unteren aus der Warteschlange entfernt und ausgeführt wird.

**LCFS-NP:**

Wartezeit: A:0 B:28 C:1 D:20 E:11 F:6

Antwortzeit: A:5 B:29 C:11 D:23 E:18 F:10

Durchschnitt: Wartezeit:11 Antwortzeit:16

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| Zeit | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| CPU | A | A | A | A | A | C | C | C | C | C | C | C | C | C | C | F | F | F | F | E | E | E | E | E | E | E | D | D | D | B |
| Stack |  | B | B | B | C  B | B | D  B | D  B | E  D  B | F  E  D  B | F  E  D  B | F  E  D  B | F  E  D  B | F  E  D  B | F  E  D  B | E  D  B | E  D  B | E  D  B | E  D  B | D  B | D  B | D  B | D  B | D  B | D  B | D  B | B | B | B |  |

**LCFS-P:**

Wartezeit: A:25 B:0 C:14 D:11 E:4 F:0

Antwortzeit: A:30 B:1 C:24 D:14 E:11 F:4

Durchschnitt: Wartezeit:9 Antwortzeit:14

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| Zeit | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| CPU | A | B | A | A | C | C | D | D | E | F | F | F | F | E | E | E | E | E | E | D | C | C | C | C | C | C | C | C | A | A |
| Stack |  | A |  |  | A | A | C  A | C  A | D  C  A | E  D  C  A | E  D  C  A | E  D  C  A | E  D  C  A | D  C  A | D  C  A | D  C  A | D  C  A | D  C  A | D  C  A | C  A | A | A | A | A | A | A | A | A |  |  |

**HRRN:**

Wartezeit: A:0 B:4 C:2 D:10 E:15 F:10

Antwortzeit: A:5 B:5 C:12 D:13 E:22 F:14

Durchschnitt: Wartezeit:6,83 Antwortzeit:11,83

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| Zeit | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| CPU | A | A | A | A | A | B | C | C | C | C | C | C | C | C | C | C | D | D | D | F | F | F | F | E | E | E | E | E | E | E |
| Queue |  | B | B | B | B  C | C | D | D | D  E | D  E  F | D  E  F | D  F  E | D  F  E | D  F  E | D  F  E | D  F  E | F  E | F  E | F  E | E | E | E | E |  |  |  |  |  |  |  |

**Prio-P:**

Wartezeit: A:1 B:0 C:5 D:0 E:15 F:10

Antwortzeit: A:6 B:1 C:15 D:3 E:22 F:14

Durchschnitt: Wartezeit:5,17 Antwortzeit:10,17

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| Zeit | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| CPU | A | B | A | A | A | A | D | D | D | C | C | C | C | C | C | C | C | C | C | F | F | F | F | E | E | E | E | E | E | E |
| Queue |  | A |  |  | C | C | C | C | C  E | F  E | F  E | F  E | F  E | F  E | F  E | F  E | F  E | F  E | F  E | E | E | E | E |  |  |  |  |  |  |  |

**MLF:**

Wartezeit: A:12 B:0 C:16 D:2 E:11 F:14

Antwortzeit: A:17 B:1 C:26 D:5 E:18 F:18

Durchschnitt: Wartezeit:9,17 Antwortzeit:14,17

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| Zeit | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| CPU | A | B | A | A | C | C | C | D | E | F | D | D | E | E | F | F | A | A | C | C | C | C | E | E | E | E | F | C | C | C |
| Queue  0 |  |  |  |  |  |  | D |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Queue  1 |  | A |  |  |  |  |  |  | D | D  E | E  F | E  F | F | F |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Queue  2 |  |  |  |  | A | A | A | A  C | A  C | A  C | A  C | A  C | A  C | A  C | A  C  E | A  C  E | C  E  F | C  E F | E  F | E  F | E  F | E  F | F | F | F | F |  |  |  |  |
| Queue  3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | C | C | C | C | C |  |  |  |