**3 bites megadott állapotokat bejáró sorrendi hálózat tervezése**

**Név:**

**Neptun kód:**

**Feladat Res jel aszinkron:**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | n. állapot | | | n+1. állapot | | | Flip-flop-ok  bemenetei | | | |
| S. | E | QC | QB | QA | QC | QB | QA |  |  |  |  |
| 0. | 0 | 0 | 0 | 0 |  |  |  |  |  |  |  |
| 1. | 0 | 0 | 0 | 1 |  |  |  |  |  |  |  |
| 2. | 0 | 0 | 1 | 0 |  |  |  |  |  |  |  |
| 3. | 0 | 0 | 1 | 1 |  |  |  |  |  |  |  |
| 4. | 0 | 1 | 0 | 0 |  |  |  |  |  |  |  |
| 5. | 0 | 1 | 0 | 1 |  |  |  |  |  |  |  |
| 6. | 0 | 1 | 1 | 0 |  |  |  |  |  |  |  |
| 7. | 0 | 1 | 1 | 1 |  |  |  |  |  |  |  |
| 8. | 1 | 0 | 0 | 0 |  |  |  |  |  |  |  |
| 9. | 1 | 0 | 0 | 1 |  |  |  |  |  |  |  |
| 10. | 1 | 0 | 1 | 0 |  |  |  |  |  |  |  |
| 11. | 1 | 0 | 1 | 1 |  |  |  |  |  |  |  |
| 12. | 1 | 1 | 0 | 0 |  |  |  |  |  |  |  |
| 13. | 1 | 1 | 0 | 1 |  |  |  |  |  |  |  |
| 14. | 1 | 1 | 1 | 0 |  |  |  |  |  |  |  |
| 15. | 1 | 1 | 1 | 1 |  |  |  |  |  |  |  |

**Flip-flop-ok bemeneti vezérlőfüggvényei:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | QB | |  |  |  |
|  | QA | |  |  |  |  |
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|  |  |  |  |  | QC |  |
|  |  |  |  |  | E |
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| --- | --- | --- | --- | --- | --- | --- |
|  |  | QB | |  |  |  |
|  | QA | |  |  |  |  |
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|  |  |  |  |  | QC |  |
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| --- | --- | --- | --- | --- | --- | --- |
|  |  | QB | |  |  |  |
|  | QA | |  |  |  |  |
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|  |  |  |  |  | QC |  |
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| --- | --- | --- | --- | --- | --- | --- |
|  |  | QB | |  |  |  |
|  | QA | |  |  |  |  |
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|  |  |  |  |  | QC |  |
|  |  |  |  |  | E |
|  |  |  |  |  |  |

**Flip-flop-ok bemeneteinek vezérlő függvényei:**

**Kapcsolási rajz:**

**Feladat Res jel szinkron:**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | n. állapot | | | n+1. állapot | | | Flip-flop-ok  bemenetei | | | |
| S. | R | E | QC | QB | QA | QC | QB | QA |  |  |  |  |
| 0. | 0 | 0 | 0 | 0 | 0 |  |  |  |  |  |  |  |
| 1. | 0 | 0 | 0 | 0 | 1 |  |  |  |  |  |  |  |
| 2. | 0 | 0 | 0 | 1 | 0 |  |  |  |  |  |  |  |
| 3. | 0 | 0 | 0 | 1 | 1 |  |  |  |  |  |  |  |
| 4. | 0 | 0 | 1 | 0 | 0 |  |  |  |  |  |  |  |
| 5. | 0 | 0 | 1 | 0 | 1 |  |  |  |  |  |  |  |
| 6. | 0 | 0 | 1 | 1 | 0 |  |  |  |  |  |  |  |
| 7. | 0 | 0 | 1 | 1 | 1 |  |  |  |  |  |  |  |
| 8. | 0 | 1 | 0 | 0 | 0 |  |  |  |  |  |  |  |
| 9. | 0 | 1 | 0 | 0 | 1 |  |  |  |  |  |  |  |
| 10. | 0 | 1 | 0 | 1 | 0 |  |  |  |  |  |  |  |
| 11. | 0 | 1 | 0 | 1 | 1 |  |  |  |  |  |  |  |
| 12. | 0 | 1 | 1 | 0 | 0 |  |  |  |  |  |  |  |
| 13. | 0 | 1 | 1 | 0 | 1 |  |  |  |  |  |  |  |
| 14. | 0 | 1 | 1 | 1 | 0 |  |  |  |  |  |  |  |
| 15. | 0 | 1 | 1 | 1 | 1 |  |  |  |  |  |  |  |
| 16. | 1 | 0 | 0 | 0 | 0 |  |  |  |  |  |  |  |
| 17. | 1 | 0 | 0 | 0 | 1 |  |  |  |  |  |  |  |
| 18. | 1 | 0 | 0 | 1 | 0 |  |  |  |  |  |  |  |
| 19. | 1 | 0 | 0 | 1 | 1 |  |  |  |  |  |  |  |
| 20. | 1 | 0 | 1 | 0 | 0 |  |  |  |  |  |  |  |
| 21. | 1 | 0 | 1 | 0 | 1 |  |  |  |  |  |  |  |
| 22. | 1 | 0 | 1 | 1 | 0 |  |  |  |  |  |  |  |
| 23. | 1 | 0 | 1 | 1 | 1 |  |  |  |  |  |  |  |
| 24. | 1 | 1 | 0 | 0 | 0 |  |  |  |  |  |  |  |
| 25. | 1 | 1 | 0 | 0 | 1 |  |  |  |  |  |  |  |
| 26. | 1 | 1 | 0 | 1 | 0 |  |  |  |  |  |  |  |
| 27. | 1 | 1 | 0 | 1 | 1 |  |  |  |  |  |  |  |
| 28. | 1 | 1 | 1 | 0 | 0 |  |  |  |  |  |  |  |
| 29. | 1 | 1 | 1 | 0 | 1 |  |  |  |  |  |  |  |
| 30. | 1 | 1 | 1 | 1 | 0 |  |  |  |  |  |  |  |
| 31. | 1 | 1 | 1 | 1 | 1 |  |  |  |  |  |  |  |

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|  |  | QB | | | |  |  |  |  |  |
|  | QA | |  |  | QA | |  |  |  |  |
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|  |  |  |  |  |  |  | 1 |  |  |  |
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|  |  |  |  | QC | | | |  |  |  |

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|  |  | QB | | | |  |  |  |  |  |
|  | QA | |  |  | QA | |  |  |  |  |
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|  |  |  |  |  |  |  | 1 |  |  |  |
|  |  |  |  |  |  |  |  |  | E |  |
|  |  |  |  |  |  |  |  |  | R |
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|  |  |  |  | QC | | | |  |  |  |

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|  |  | QB | | | |  |  |  |  |  |
|  | QA | |  |  | QA | |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | 1 |  |  |  |
|  |  |  |  |  |  |  |  |  | E |  |
|  |  |  |  |  |  |  |  |  | R |
|  |  |  |  |  |  |  |  |  |  |
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|  |  |  |  | QC | | | |  |  |  |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | QB | | | |  |  |  |  |  |
|  | QA | |  |  | QA | |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | 1 |  |  |  |
|  |  |  |  |  |  |  |  |  | E |  |
|  |  |  |  |  |  |  |  |  | R |
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|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | QC | | | |  |  |  |

**Flip-flop-ok bemeneteinek vezérlő függvényei:**

**Kapcsolási rajz:**