Classroom Tasks

Task 1

Diagram, schematic

Description automatically generated

Diagram, schematic

Description automatically generatedTask 2

Task 3

Diagram

Description automatically generated with low confidence

Task 4

Diagram, schematic

Description automatically generated

Lab Tasks

Task #1

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| E’ | S2 | S1 | S0 | I0 | I1 | I2 | I3 | I4 | I5 | I6 | I7 | Z | Z’ |
| 1 | X | X | X | X | X | X | X | X | X | X | X | 0 | 1 |
| 0 | 0 | 0 | 0 | 0 | X | X | X | X | X | X | X | 0 | 1 |
| 0 | 0 | 0 | 0 | 1 | X | X | X | X | X | X | X | 1 | 0 |
| 0 | 0 | 0 | 1 | X | 0 | X | X | X | X | X | X | 0 | 1 |
| 0 | 0 | 0 | 1 | X | 1 | X | X | X | X | X | X | 1 | 0 |
| 0 | 0 | 1 | 0 | X | X | 0 | X | X | X | X | X | 0 | 1 |
| 0 | 0 | 1 | 0 | X | X | 1 | X | X | X | X | X | 1 | 0 |
| 0 | 0 | 1 | 1 | X | X | X | 0 | X | X | X | X | 0 | 1 |
| 0 | 0 | 1 | 1 | X | X | X | 1 | X | X | X | X | 1 | 0 |
| 0 | 1 | 0 | 0 | X | X | X | X | 0 | X | X | X | 0 | 1 |
| 0 | 1 | 0 | 0 | X | X | X | X | 1 | X | X | X | 1 | 0 |
| 0 | 1 | 0 | 1 | X | X | X | X | X | 0 | X | X | 0 | 1 |
| 0 | 1 | 0 | 1 | X | X | X | X | X | 1 | X | X | 1 | 0 |
| 0 | 1 | 1 | 0 | X | X | X | X | X | X | 0 | X | 0 | 1 |
| 0 | 1 | 1 | 0 | X | X | X | X | X | X | 1 | X | 1 | 0 |
| 0 | 1 | 1 | 1 | X | X | X | X | X | X | X | 0 | 0 | 1 |
| 0 | 1 | 1 | 1 | X | X | X | X | X | X | X | 1 | 1 | 0 |

Task #2

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| D | S0 | S1 | S2 | Y0 | Y1 | Y2 | Y3 | Y4 | Y5 | Y6 | Y7 |
| D | 0 | 0 | 0 | D | X | X | X | X | X | X | X |
| D | 0 | 0 | 1 | X | D | X | X | X | X | X | X |
| D | 0 | 1 | 0 | X | X | D | X | X | X | X | X |
| D | 0 | 1 | 1 | X | X | X | D | X | X | X | X |
| D | 1 | 0 | 0 | X | X | X | X | D | X | X | X |
| D | 1 | 0 | 1 | X | X | X | X | X | D | X | X |
| D | 1 | 1 | 0 | X | X | X | X | X | X | D | X |
| D | 1 | 1 | 1 | X | X | X | X | X | X | X | D |

Task #3(I)

Diagram, schematic

Description automatically generated

Task #3(II)

Diagram, schematic

Description automatically generated

Task #3(III)

Diagram

Description automatically generated

Task #3(IV)

Diagram, schematic

Description automatically generated