ICA06 – Tilstandsmaskiner

1. NOT gate table

|  |  |
| --- | --- |
| Input | Output |
| A | NOT A |
| 0 | 1 |
| 1 | 0 |

NOT gate: Inverts the input value for output

AND gate table

|  |  |  |
| --- | --- | --- |
| Input | Input | Output |
| A | B | A AND B |
| 0 | 0 | 0 |
| 0 | 1 | 0 |
| 1 | 0 | 0 |
| 1 | 1 | 1 |

AND gate: Only positive output when 2 positive inputs

OR gate table

|  |  |  |
| --- | --- | --- |
| Input | Input | Output |
| A | B | A OR B |
| 0 | 0 | 0 |
| 0 | 1 | 1 |
| 1 | 0 | 1 |
| 1 | 1 | 1 |

OR gate: Only 1 positive input needed for a positive output

XOR gate table

|  |  |  |
| --- | --- | --- |
| Input | Input | Output |
| A | B | A XOR B |
| 0 | 0 | 0 |
| 0 | 1 | 1 |
| 1 | 0 | 1 |
| 1 | 1 | 0 |

XOR gate: Positive output happens only when 1 input is positive

NOR gate table

|  |  |  |
| --- | --- | --- |
| Input | Input | Output |
| A | B | A NOR B |
| 0 | 0 | 1 |
| 0 | 1 | 0 |
| 1 | 0 | 0 |
| 1 | 1 | 0 |

NOR gate: Positive output only when both inputs are negative