

Week 13 lab - Introduction to digital

Task 1 - NOR Gate

Using a 74LS02 quad NOR gate, verify the NOR gate truth table.

Task 2 - Two bits adder

Construct a circuit which adds two bits according to rules of binary arithmetics. Note, we have plenty of ready to use basic gates (NAND, NOR, AND, Inverter) but there is no XOR gate. You are not allowed to use it even if you find it.

Make sure that the instructor approves and marks that your circuit does the job according to the specification.

Task 3 bonus - 3 bits adder (+5bp)

Under the same constrains as in task 2, construct a 3 bit adder.