DIGITAL ELCTRONICS LAB

List of Experiments

1. Design and implementation of basic logic gates (AND,OR, NOT) using universal gates(NAND and NOR)
2. Design and implementation of Half Adder and Full Adder circuits, using logic gates.
3. Design and implementation of Half Subtractor and Full Subtractor circuits, using logic gates.
4. Design and implementation of code converters (Binary to Grey and Gray to Binary) using logic gates.
5. Design and implementation of 4x1 Multiplexer and De-multiplexer.
6. Design and implementation of One bit and Two bit comparators.
7. Design and implementation of 16 bit odd/even party checker generator using IC 74180.
8. Design and implementation of 8x3 Encoder and 3x8 Decoder.
9. Design and verification of various flip-flops D,T and JK.
10. To design and implement
    i. Serial in serial out
    ii. Serial in parallel out
    iii. Parallel in series out
    iv. Parallel in parallel out