

Hardware Assignment Report

Name: ANURAG

Roll Number: BT22BTECH11002

1 Aim

In this assignment, we have made a Random number generator using shift registers.

2 Procedure

1. We connected the 555 timer circuit.
2. Then we connected the Clock output of the 555 timer circuit to the clock signal of D-Flip flops.
3. Now we make the circuit for shift registers using 4 D-Flip flops (using two 7474 IC's).
4. Then we connected XOR gate (7486 IC).
5. We connected the decoder (7447 IC) and connected its A, B, C, D with Q0, Q1, Q2, Q3 respectively.
6. Then we connected the seven-segmented display and connected it with the decoder (7447 IC).
7. We connected all the independent parts with each other and then connected the power source.

3 Conclusion

The output was changing digits on the seven-segment display.

4 Circuit Image

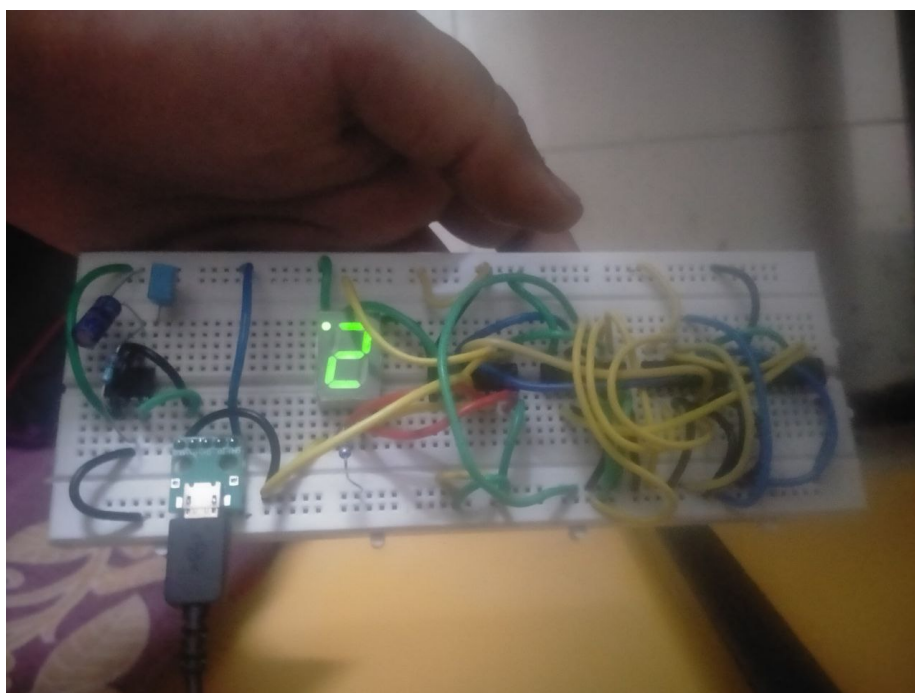


Figure 1: circuit image