Lab Work 3 (Part 3)

Flip-flop ICs

We are going to look at samples of flip-flop IC:

- D Flip-flop (DFF 7474: Dual D-FF positive-edge triggered, asynchronous preset & clear)
- J-K Flip-flop (JKFF 7476: Dual JK-FF asynchronous preset & clear)
- J-K Flip-flop (JKFF 74112: Dual JK-FF negative-edge triggered, asynchronous preset & clear)

Things To Do

THING1 Implement a 2-bit counter (asynchronous, continuously counts up).

THING2 (Optional) Implement **THING1** with start/stop/reset button(s).

THING3 Implement a 4-bit counter (asynchronous, continuously counts up).

THING4 (Optional) Implement a 4-bit counter (asynchronous, continuously counts down).

THING5 Implement a 4-bit running light (**Hint**: Ring Counter - you need a reset switch for this).