

**PRACTICUM DIGITAL SYSTEM**

**MODUL 12**

**DIGITAL SYSTEM**



**By :**

**Donny Rizal Adhi Pratama**

**L200183161**

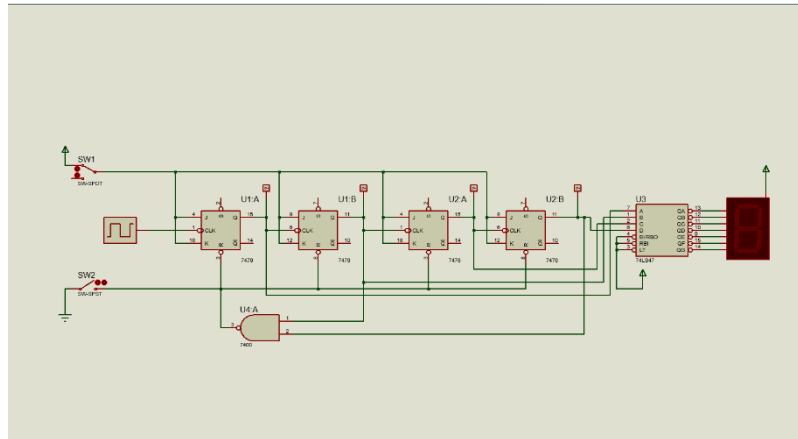
**INFORMATION TECHNOLOGY**

**FACULTY OF COMMUNICATION AND INFORMATICS**

**MUHAMMADIYAH UNIVERSITY OF SURAKARTA**

## Experiment 1

### a) Circuit Board



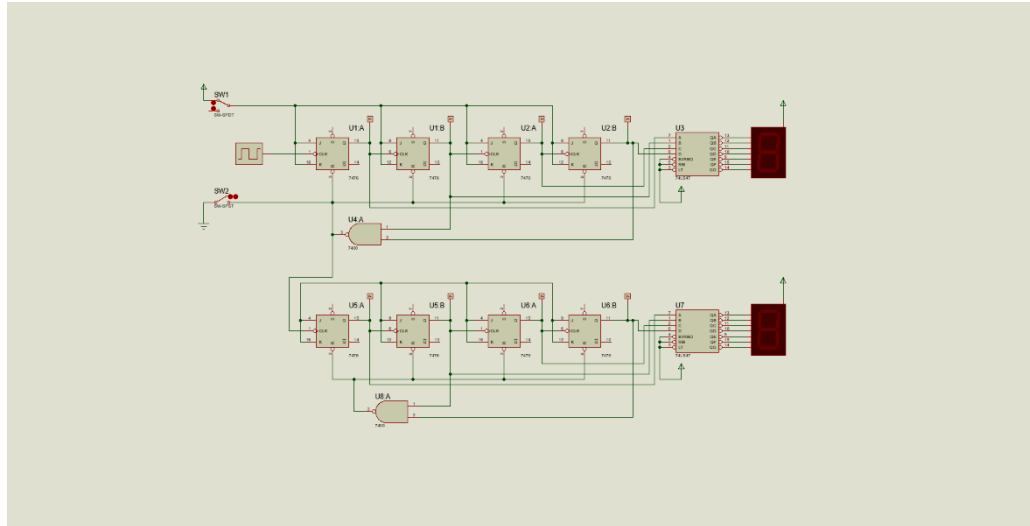
Picture 12.1 MOD 10 and decoder

1. Start the simulation and then what happens to the simulation?

Answer: The 7-seg became too fast in which because of the Frequency (50Hz) is too much and if you slow it into 1 Hz. It will become clear and the output is 0 1 2 3 4 5 b 7 8 9 the reason why the 6 in this circuit becomes b. it because of BCD-7seg.

## Experiment 2

### a. Circuit Board



Picture 12.2 MOD10 and MOD 6 decoder circuit

b. Change the Clock Frequency to 250Hz. What the function Clock in the circuit above?

Answer: to set the speed of 7 Segment output above

c. Explain the function of SW-SPDT in the circuit above!

Answer: Nothing, even though you turn it off the SW-SPDT it is still active and counting

d. Explain the function of SW-SPST in the circuit above!

Answer: to stop counting.