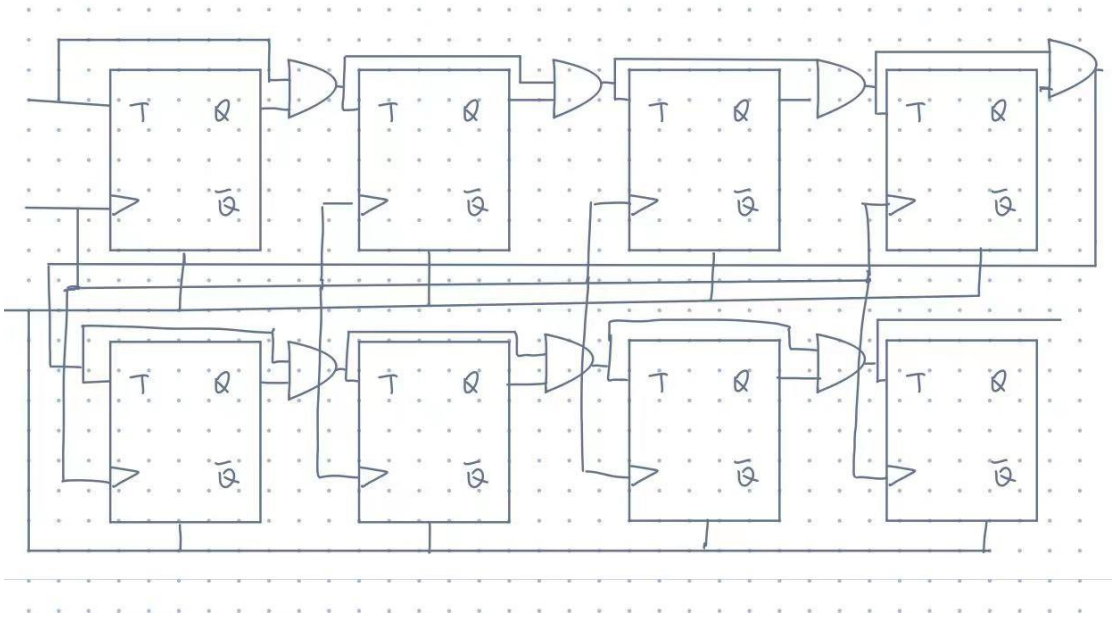


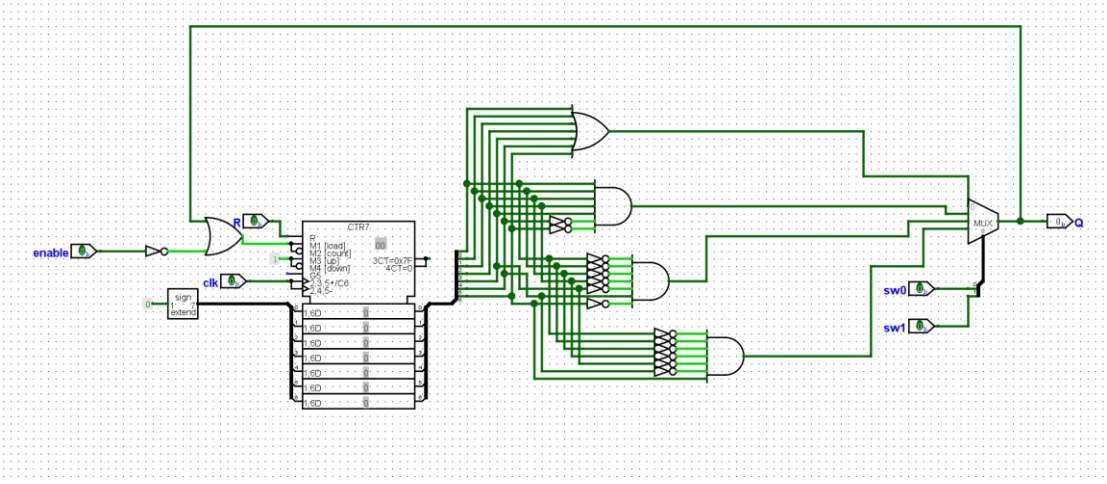
Part1

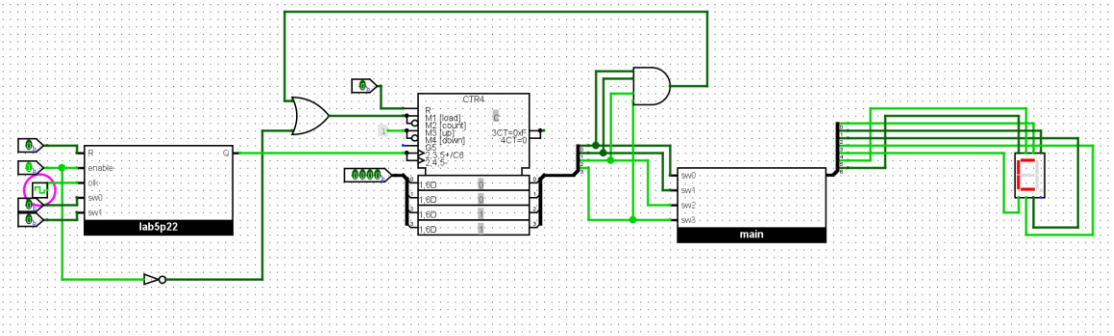
2. The first flip-flop is labelled as Q0, and then Q1,⋯,Q7.

Part2

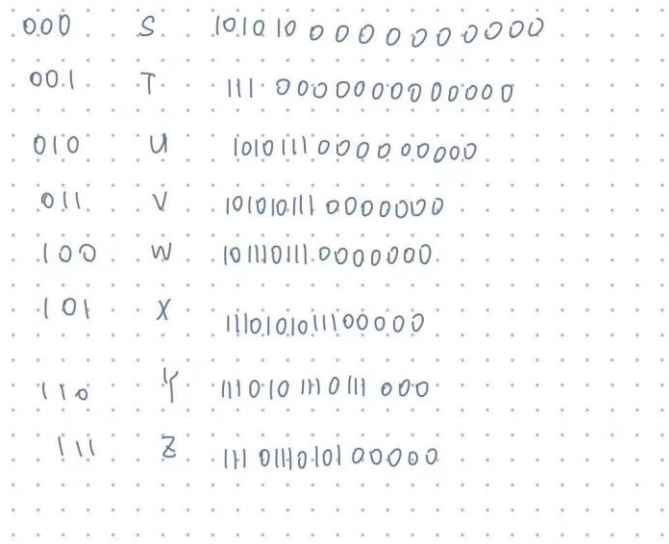
1. Because when the value will return to 0 after the clock rise again from the maximum value.
2. Change the adder circuit to 1001.
3. Wrap around: change to 0
   Load next value: the output start from the load value.
   Stay at value: does not change
   Continue counting: change to 0.

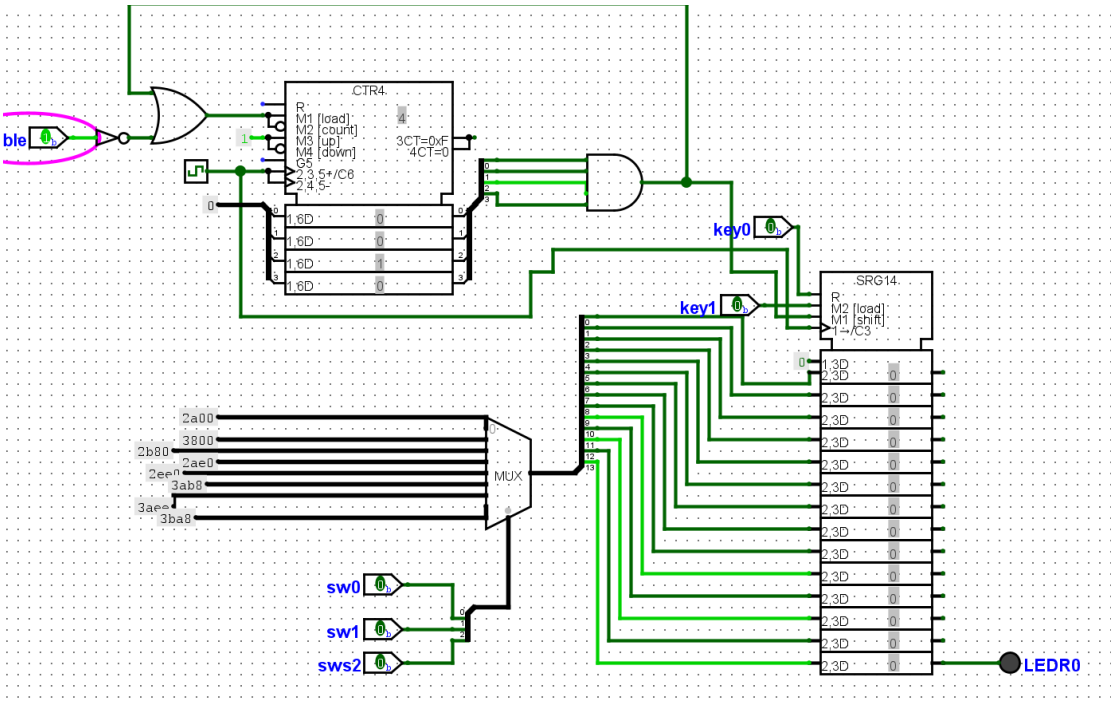
1. Log(50m)=26




lab5p22
CTR4
main

Part3




CTR4
ble
key0
key1
SRG14
MUX
sw0
sw1
sws2
LEDR0