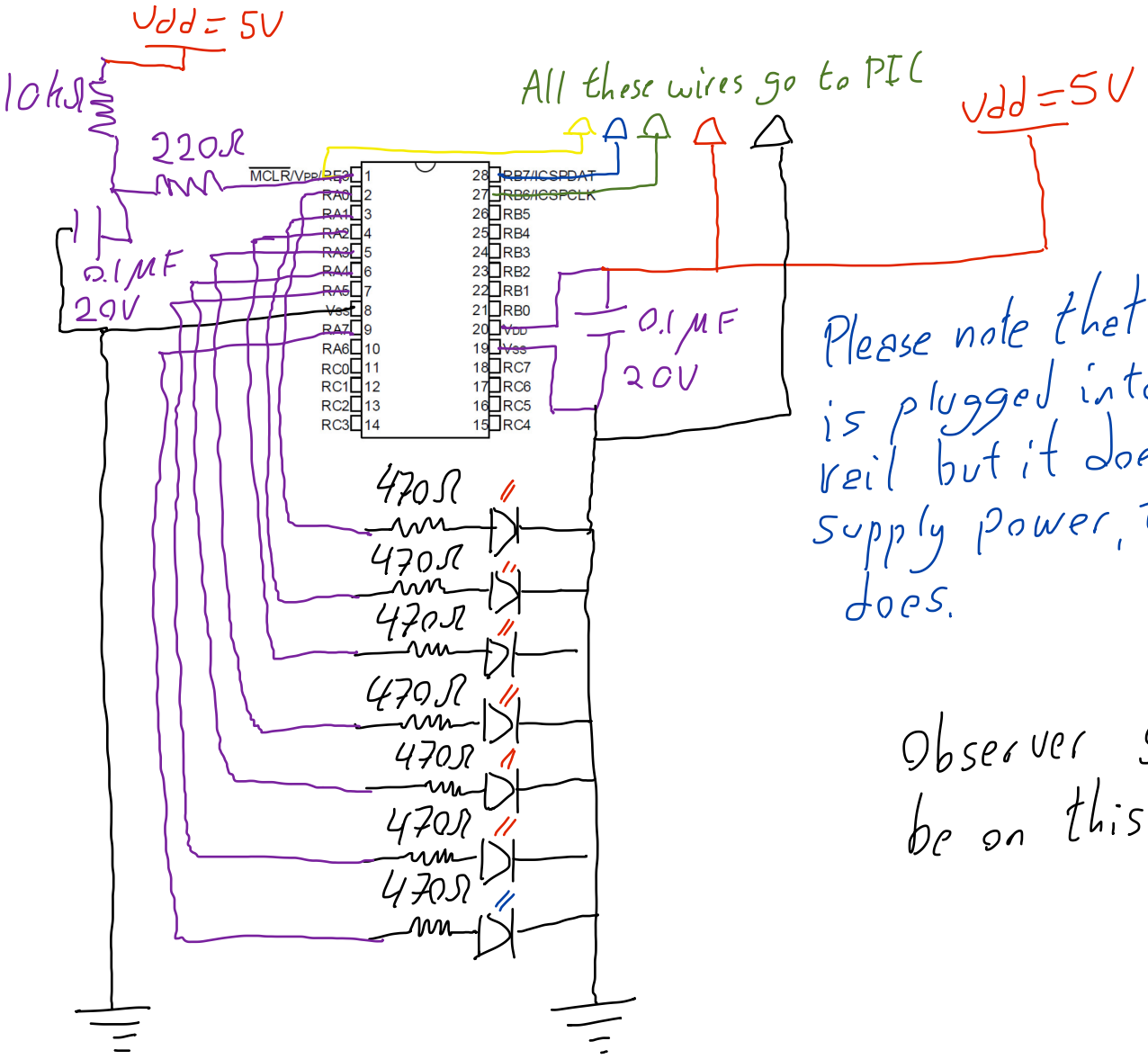
# PIC Activity 3 Circuit schematic




Please note that PIC is plugged into power rail but it does not supply power, the wall does.

Observer should be on this side.

# PIC Activity 3
# Program Design Chart.

First Initilize TRISA ANSELA & LATA

Probably
```
TRISA = 0x00;
ANSELA = 0x00;
LATA = 0x80;
```
as for PIC activity 2. Nothing has changed for these two.

-D Need to feed LATA 1000000 binary value to make only pin RA7 output logic 1 (5Volts)

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Now consider main program.

steps:

① create counters for loops.

② Make a primary "while" loop where LATA can be incremented upward from binary 10000000 to 10111111 so that the pins output logical 1's and 0's in a binary counting pattern

③ Make a second "while" loop inside the primary "while" loop to burn off some time between adding to LATA

④ After LATA reaches a binary value of 10111111 exit primary "while" loop, set LATA back to 10000000 using bitwise operation, and let program run out.

# Basic Idea

```
Void UserAppRun(void)
{
Create two counters, one for each loop.

    Create an outer "while" loop that runs
    for 111111₂ cycles.
    {
      LATA++; ~ just need to increment upward.

        Create an inner "while" loop that
        burns off about 250ms { In PIC activity
        {                       two trying to use math
          u32Counter++;         to find the correct number
                                to count to for the time
        }                       delay failed. I will start
                                at one-million and then use
        Will need to reset inner loop counter here.
                                trial and error.
    }

    Use some method to reset LATA.

Let program run out.
"main" will autometically run it again.
```