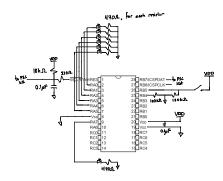
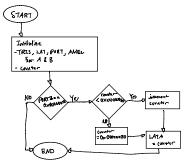
Activity 4

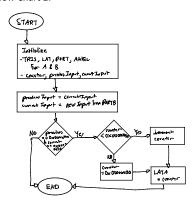
February 15, 2021 10:46 PM

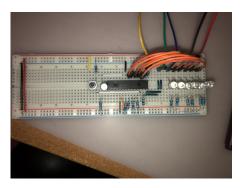


Flow Chart 1:



Flow Chart 2:





Program Design 1:

Initialization (GPIO) // this runs only once when the code starts

- Configure TRIS, ANSEL, LAT (or PORT) registers for A and B
- Initialize counter
- Turn on RA7 LED

Initialization (variable)

- Variable to record new input and one prior

```
Function:
{
    Condition: If button is pressed input on button equals 1
    Condition: if LATA < 0b10111111
    Increment counter
    Else
    Reset counter to original position // original position RA7 is on Set LATA equal to counter
    Leave function to return to main
}
```

Program Design 2:

Initialization (GPIO) // this runs only once when the code starts

- Configure TRISA, ANSELA, LATA (or PORTA) registers
- Initialize counter, previousInput, currentInput
- Turn on RA7 LED

Initialization (variable)

- Variable to record new input and one prior

```
Function:

{

Update "new input" and "input prior" variables

previousInput equals currentInput

currentInput equal PORTB inputs

Condition: If button is toggled // input transitions from LOW to HIGH, determined using recorded inputs 0x000000010 to 0x00000030

Condition: if LATA < 0b10111111

Increment counter

Else

Reset counter to original position // original position RA7 is on Set LATA equal to counter

Leave function to return to main
}
```