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#### Two bit adder with overflow:

https://wokwi.com/projects/380067498483226625

### 7 bit Register

https://wokwi.com/projects/380244089599942657

#### 6 bit register

https://wokwi.com/projects/380431037675172865

#### Keyboard #1 - RCA

https://wokwi.com/projects/380242225035479041

#### **Keyboard #1 - RCA with Val. Comp**

https://wokwi.com/projects/380248831001318401

#### keyboard 1 decoder

https://wokwi.com/projects/380247020478325761

## **Keyboard #1**

Note	Frequency	Div Value	Div Rounded
C3	130.81	76.44675484	76
D3	146.83	68.10597289	68
E3	164.81	60.67592986	61
F3	174.61	57.27048852	57
G3	196	51.02040816	51
A3	220	45.45454545	45
В3	246.94	40.49566696	40

# **Keyboard #2**

Note	Frequency	Div Value	Div Rounded
C4	261.63	38.22191645	38
D4	293.66	34.05298645	34
E4	329.63	30.33704457	30
F4	349.23	28.6344243	29
G4	392	25.51020408	26
A4	440	22.72727273	23
B4	493.88	20.24783348	20

- PWM circuit to drive a servo
- 4b ALU
- "old school" 8b piano
- Tic-tac-toe game (no AI)
- Morse code generator
- Make LEDs blink in fun ways....
- RGB LEDs!

## **PWM**

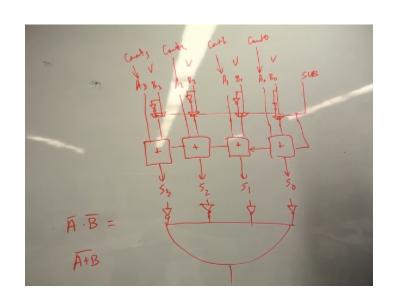
Two registers 8-bit and 5-bit

Hit 8b at 200 sends reset to 5 bit

Hit 5b at 15 change signal

PWM What we got

https://wokwi.com/projects/379782970801814529



Syncronous reset

https://wokwi.com/projects/380426967847445505

Add subtractor

https://wokwi.com/projects/380434949741496321

Single Frequency Downsampled Generator <a href="https://wokwi.com/projects/380419326891676673">https://wokwi.com/projects/380419326891676673</a>

B (second value): +0.470649791 s A (first value): +0.469049835 s

https://wokwi.com/projects/380419539639363585

FINAL KEYBOARD PROJECT!!!!

https://wokwi.com/projects/380433129281351681