



FINAL PROJECT: FUND OF ELECTRIC & ELECTRONIC

SECTION A56

GROUP MEMBERS

- | | |
|-----------|--------------|
| 01 | ESCOTE |
| 02 | JIMENEZ |
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| 04 | DELOS SANTOS |
| 05 | TOPACIO |
| 06 | GUERRERO |
| 07 | SIBAYAN |
| 08 | UMALI |
| 09 | BADIOLA |
| 10 | QUINTILLAN |
| 11 | RIVERA |
| 12 | MENDOZA |



CCIS DEPARTMENT



MINIMUM REQUIREMENTS

- 3 PATTERNS (POKEMON THEME)
- SCROLLING MESSAGES
- SHUTDOWN BUTTON (SEE NEXT SLIDE)
- CONTROLLABLE VIA WEB BROWSER

EE105P Minimum Project Specifications

Hardware:

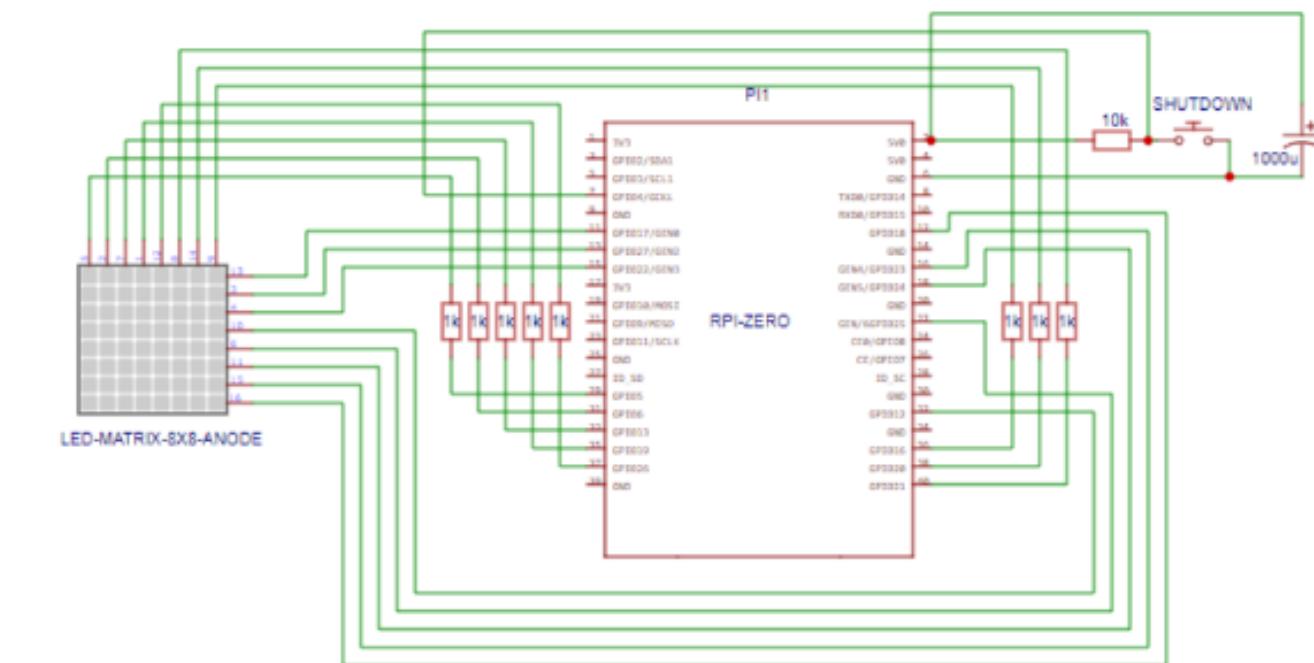
- Microcontroller – Raspberry Pi Zero W with Raspberry Pi OS
- 8 x 8 LED Matrix

Function:

- Must be able to display patterns consistent with a Christmas theme.
- Minimum of 3 patterns.
- Must be able to display scrolling messages.
- Must have a shutdown button for shutting down Raspberry Pi without the need for computer.
- Must be controllable via a web browser.
 - Display on matrix can be controlled automatically or manually.
 - Scrolling messages can be modified.
 - Raspberry Pi can be shutdown.
- Program must automatically start when raspberry pi is powered up.

Schematic Diagram:

For uniformity, the recommended schematic diagram is shown below;



HARDWARE



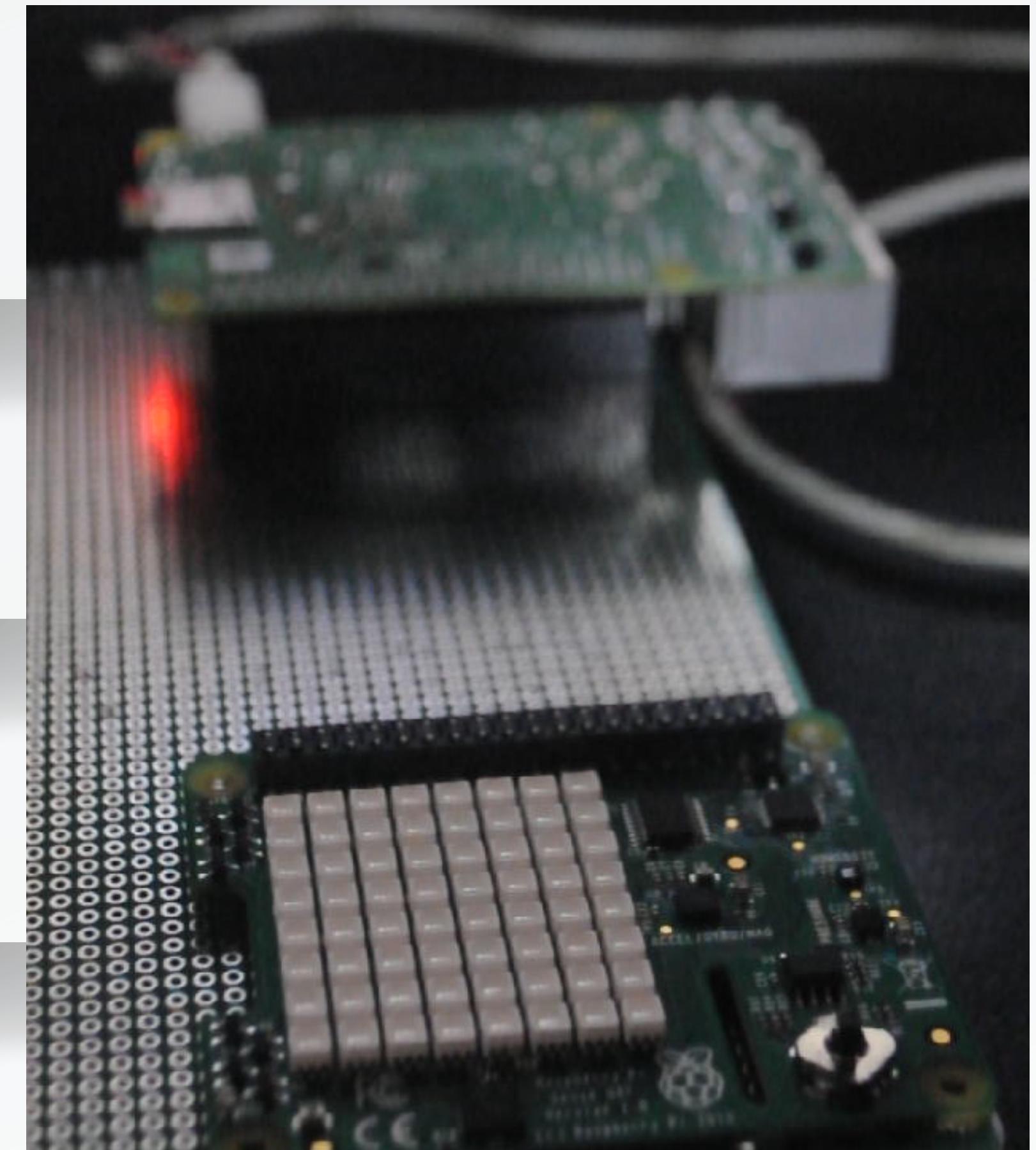
RASPBERRY PI



SENSE-HAT



LED MATRIX





SHUTDOWN FUNCTION

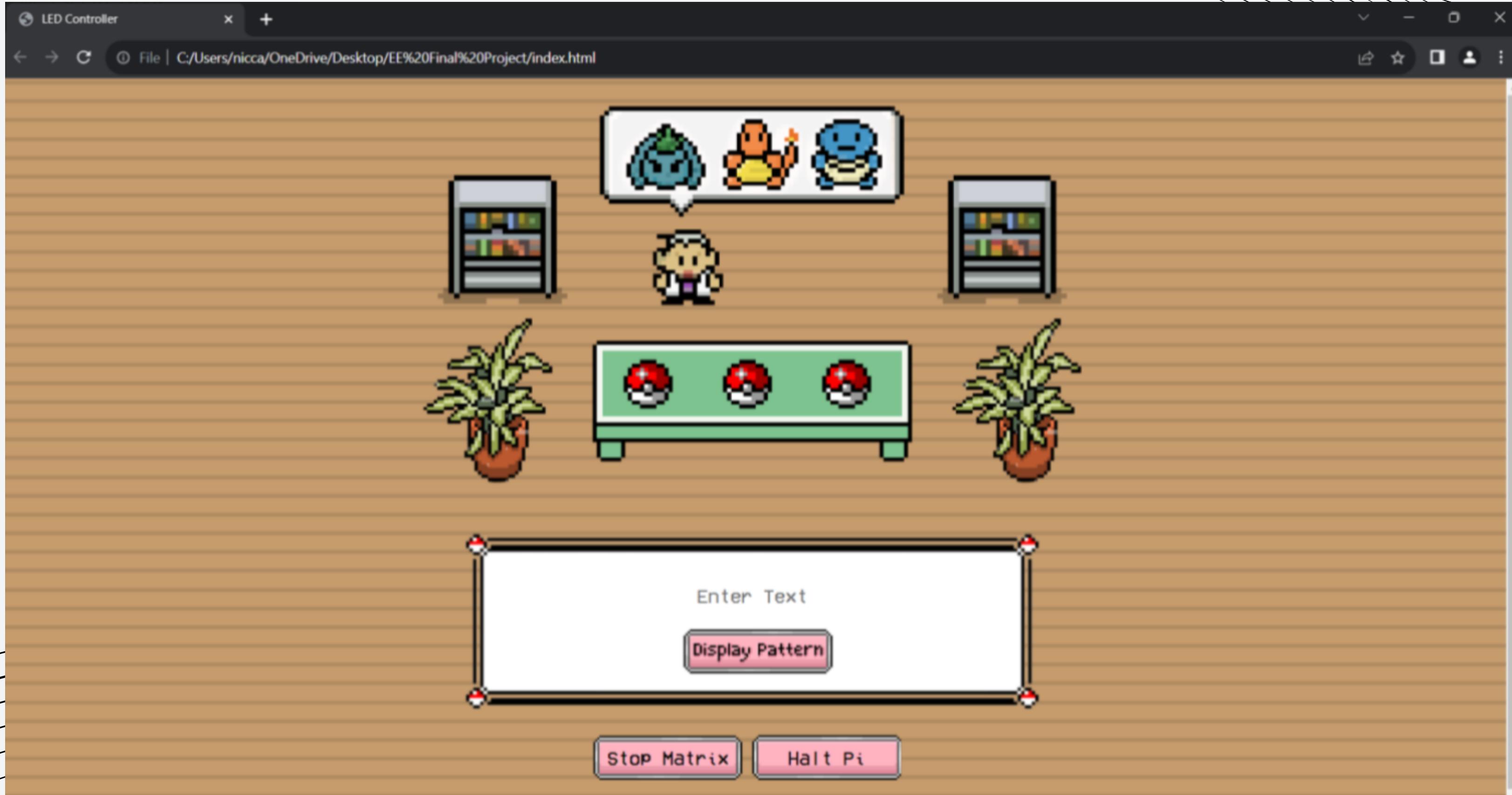
Function:

- Must have a shutdown button for shutting down Raspberry Pi without the need for computer.

- **CAN SHUTDOWN RASPBERRY PI
WITHOUT THE NEED FOR A COMPUTER**

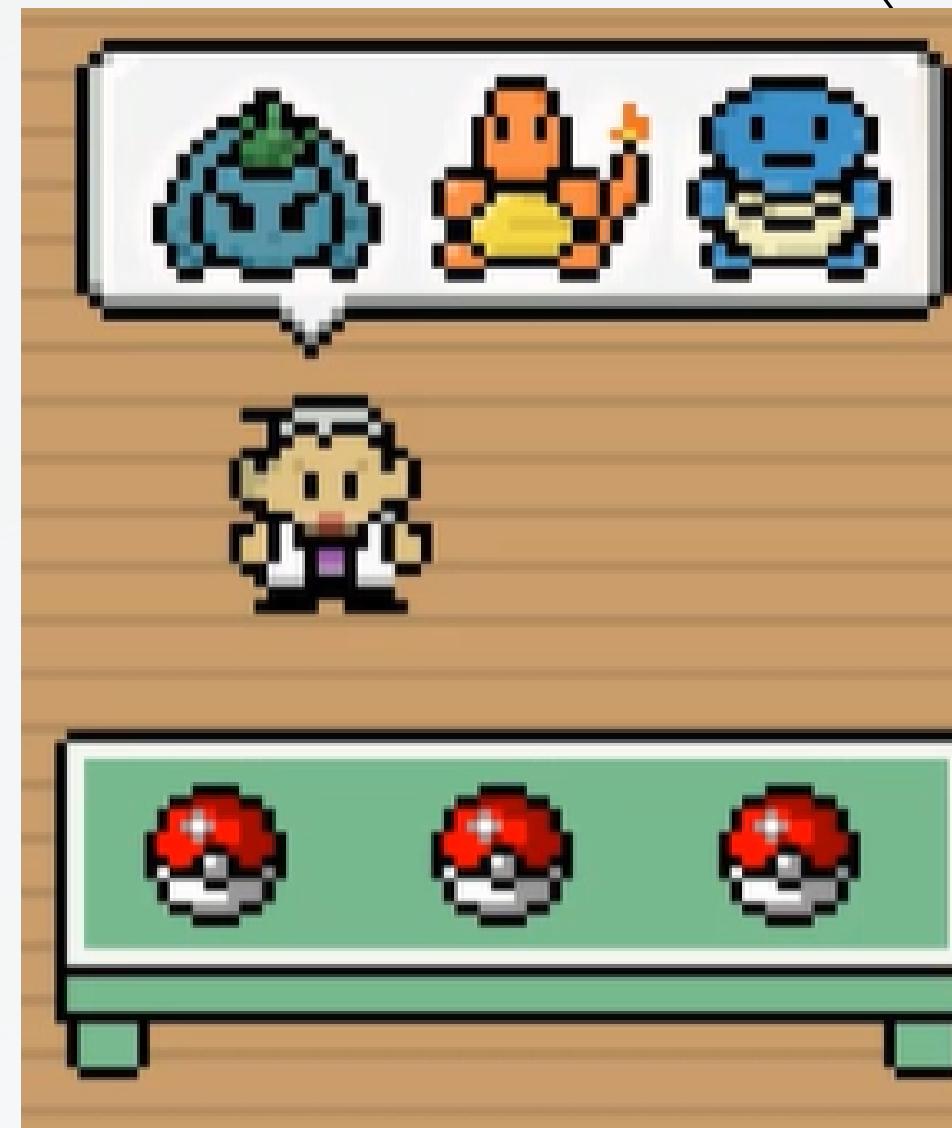


WEB BROWSER



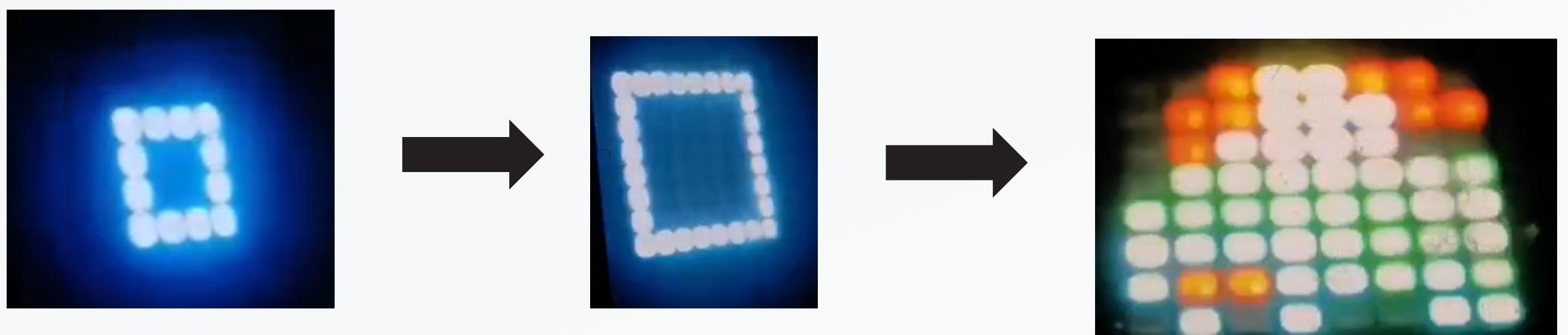
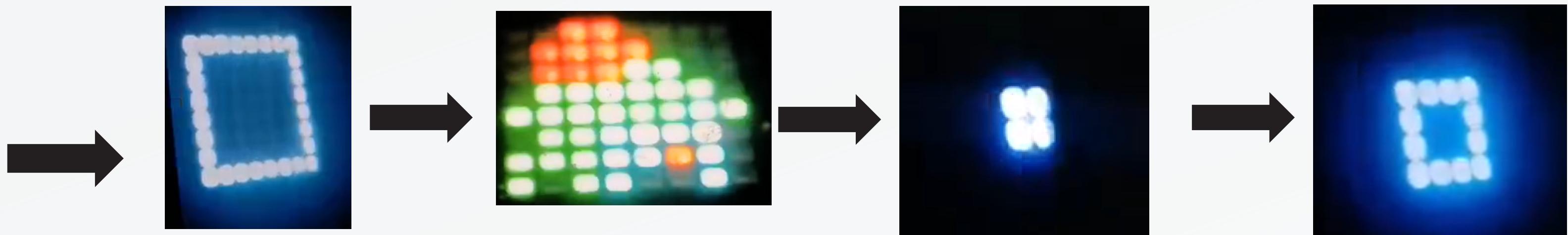
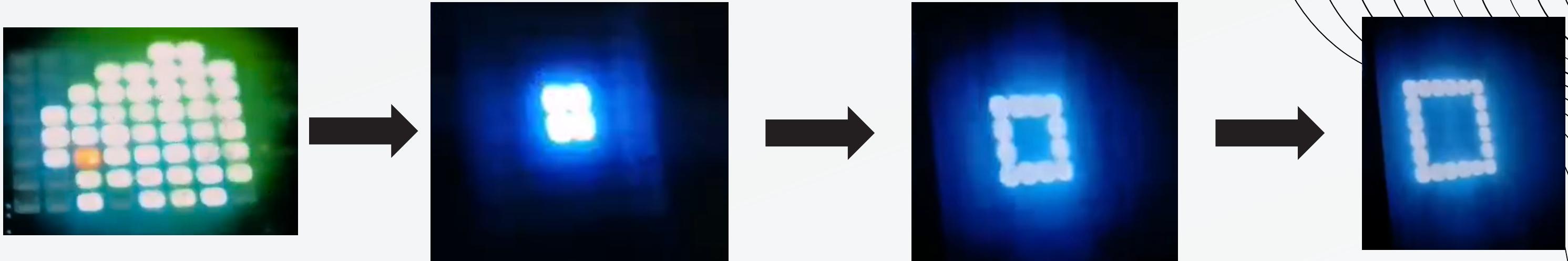


PATTERNS:



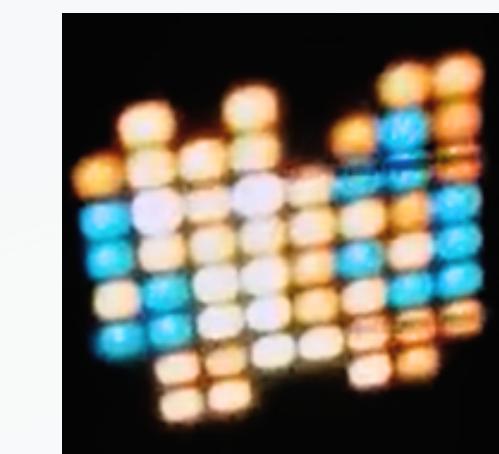
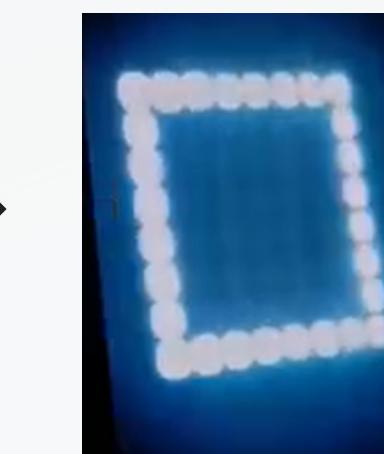
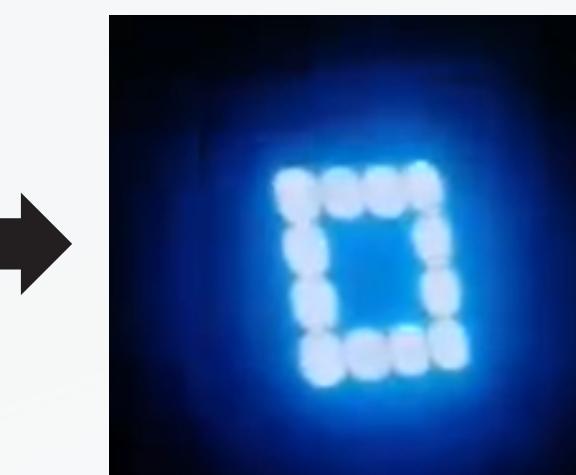
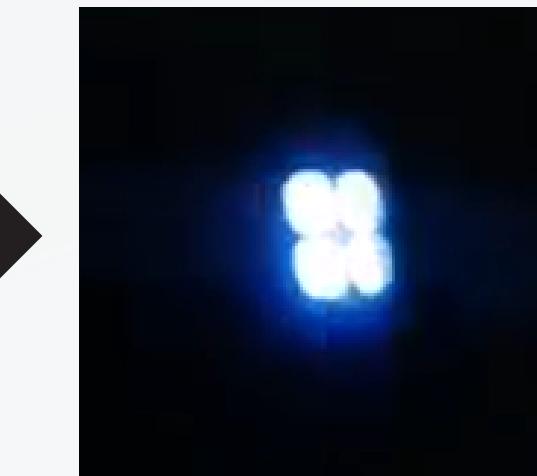
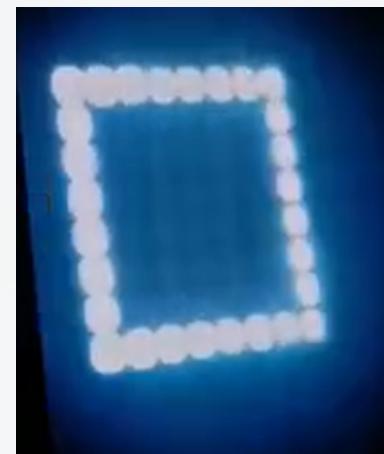
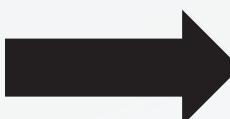
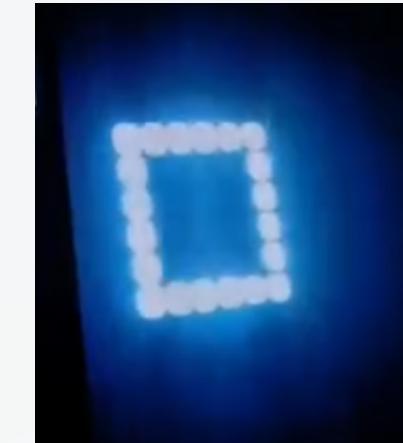
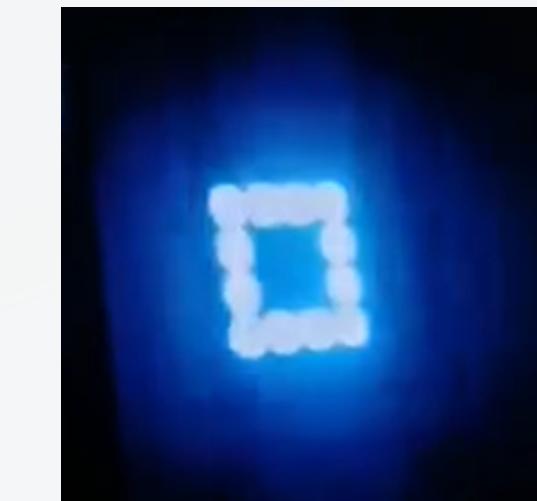
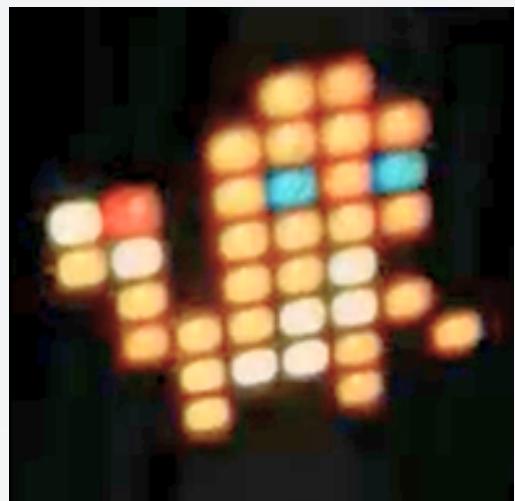
After clicking one of the balls (BUTTONS), it will display a pokemon evolution (PATTERN) which corresponds to the pokemon above them.

1ST PATTERN (BULBASAUR)



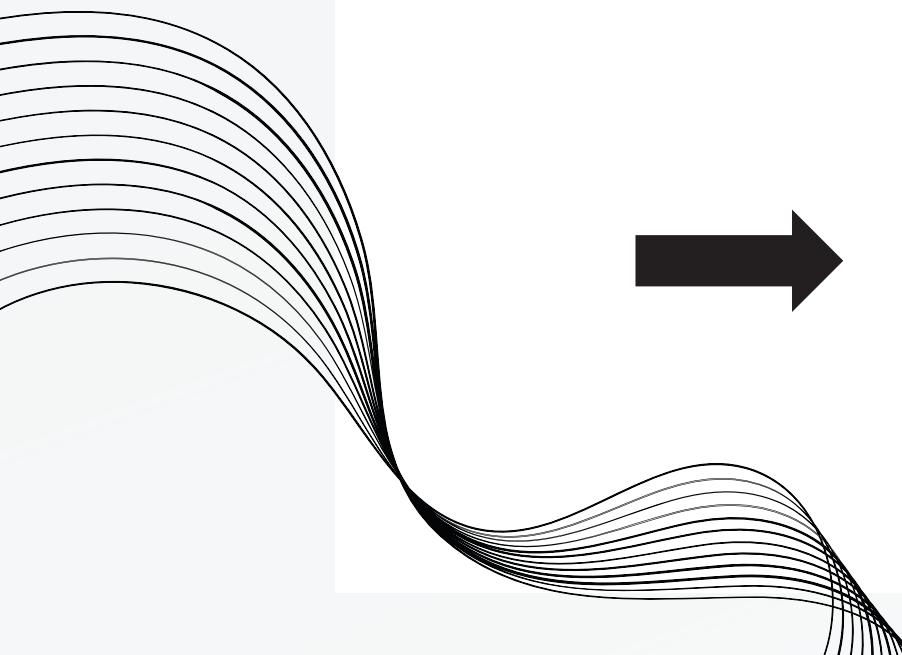
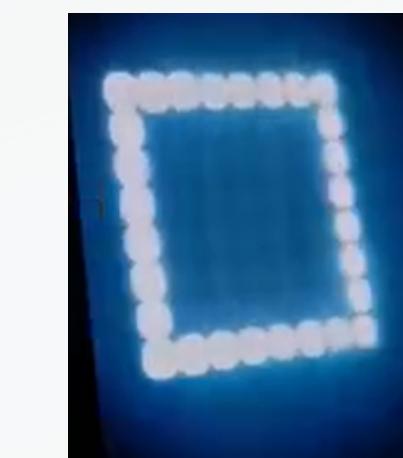
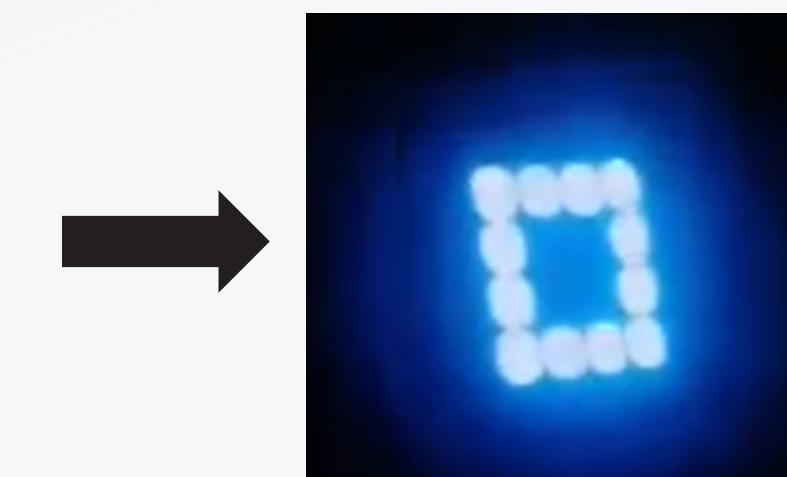
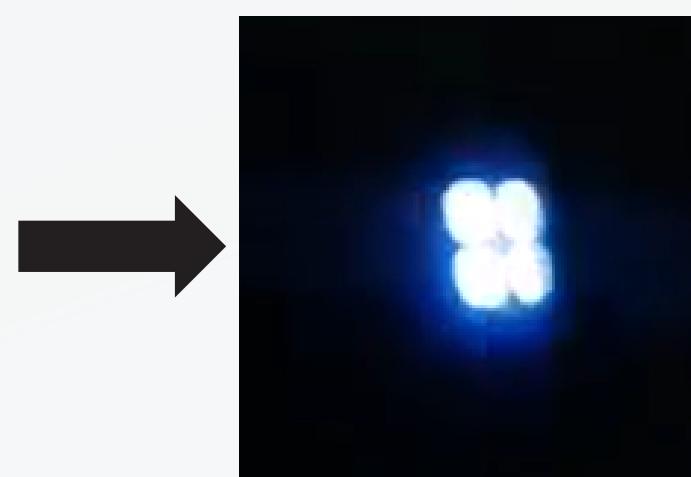
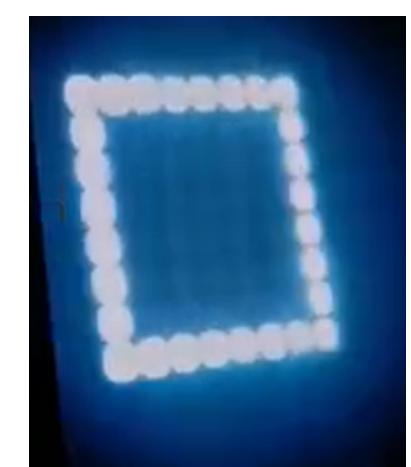
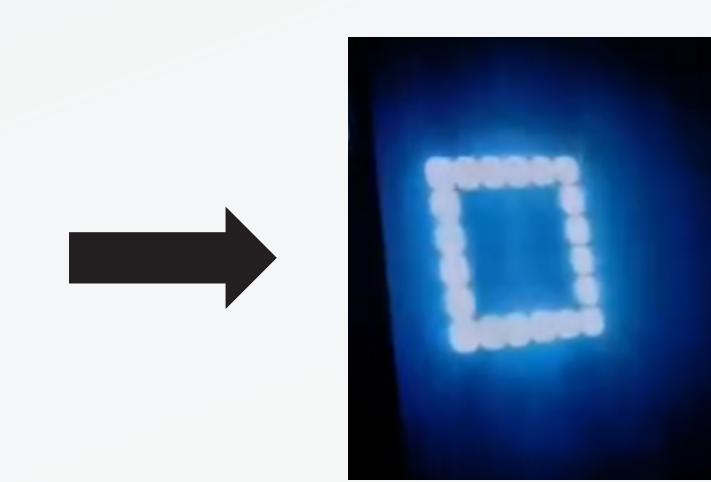
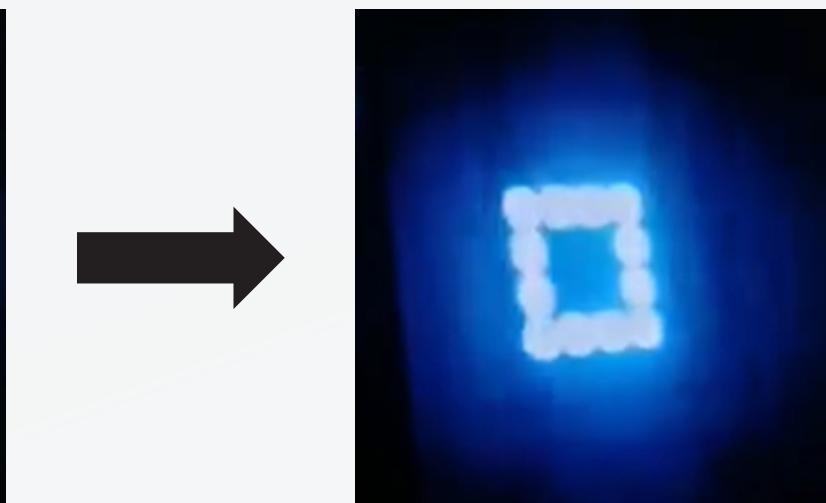
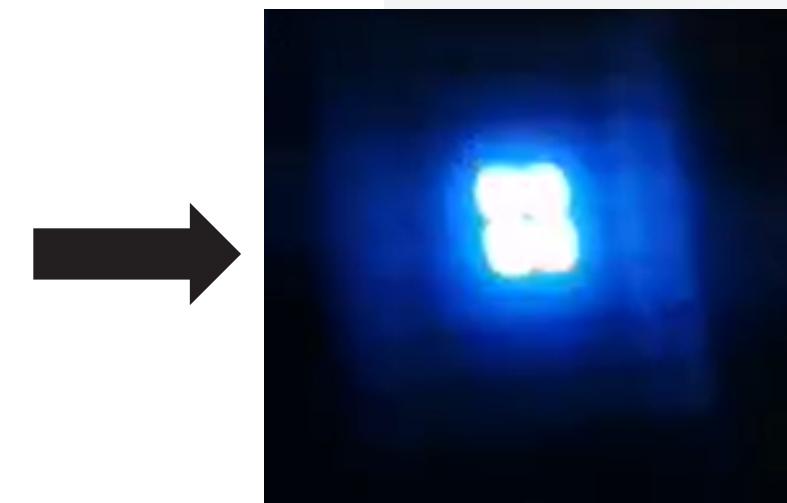
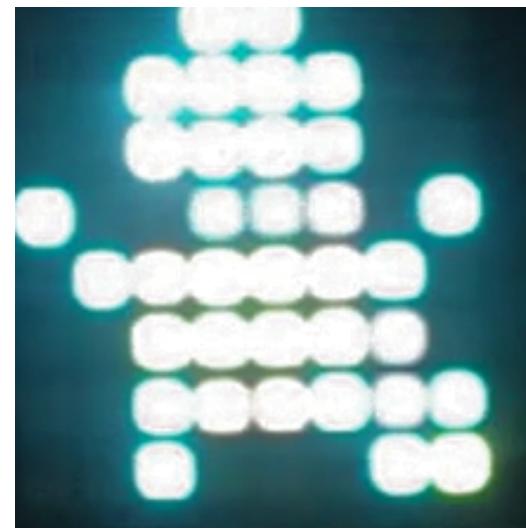
OUTPUT IN SENT VIDEO

2ND PATTERN (CHARIZARD)



OUTPUT IN SENT VIDEO

3RD PATTERN (SQUIRTLE):



OUTPUT IN SENT VIDEO



PATTERNS:



After entering a Text, it will display the message you input after you click the “Display Pattern”

OUTPUT IN SENT VIDEO



**THANKS FOR
WATCHING**

