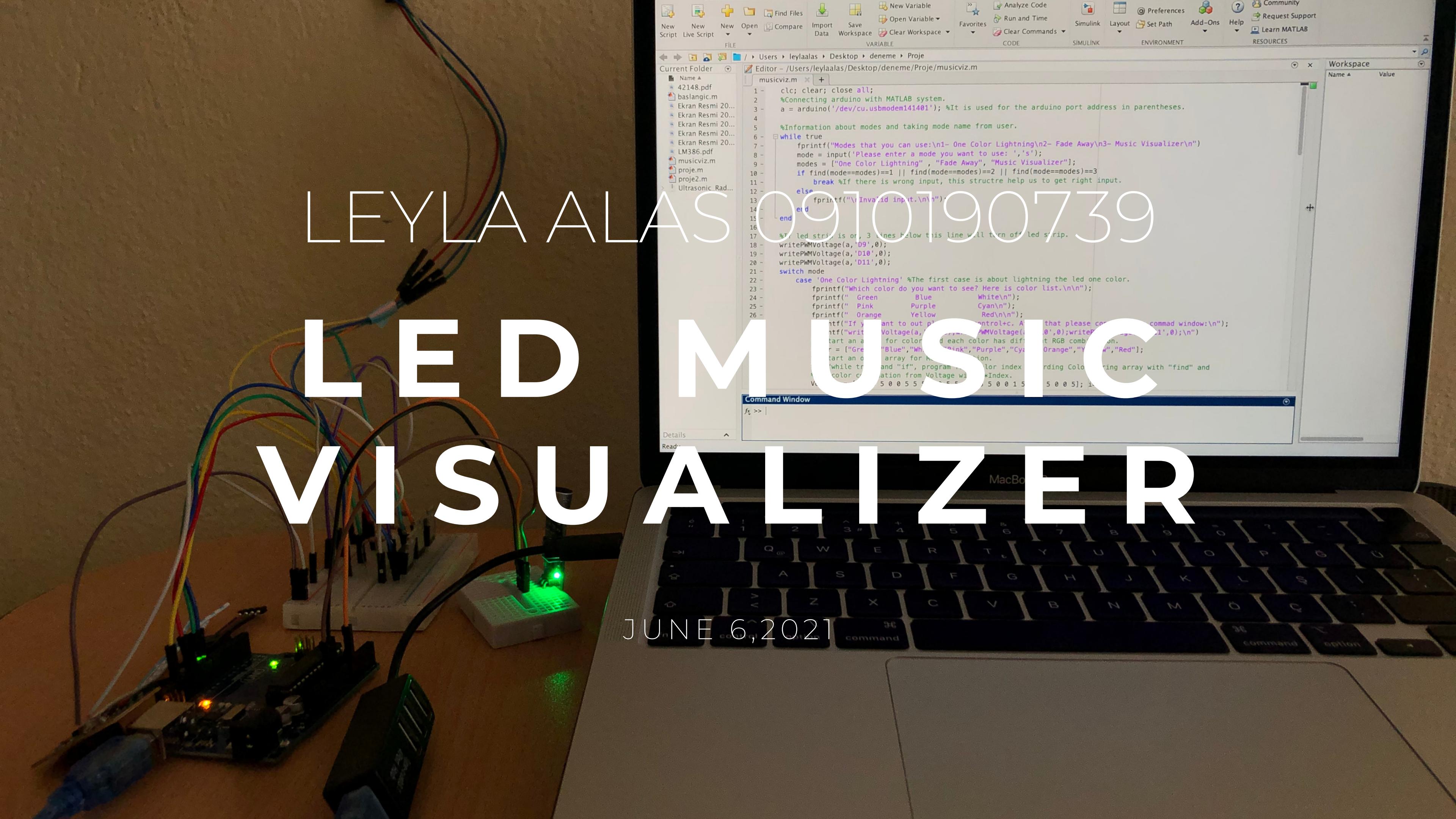


# LEYLA ALAS 0910190739

# LED MUSIC VISUALIZER

JUNE 6, 2021



Modes that you can use:

1- One Color Lightning

2- Fade Away

3- Music Visualizer

 Please enter a mode you want to use: |

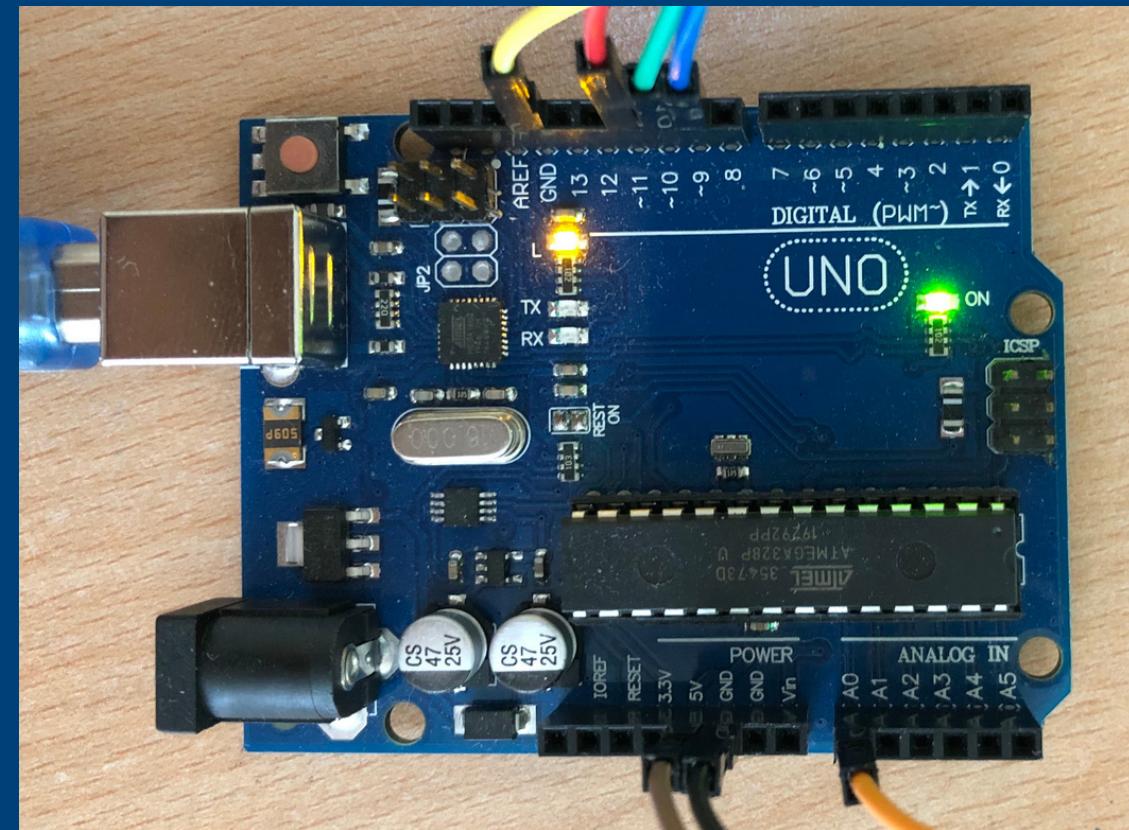
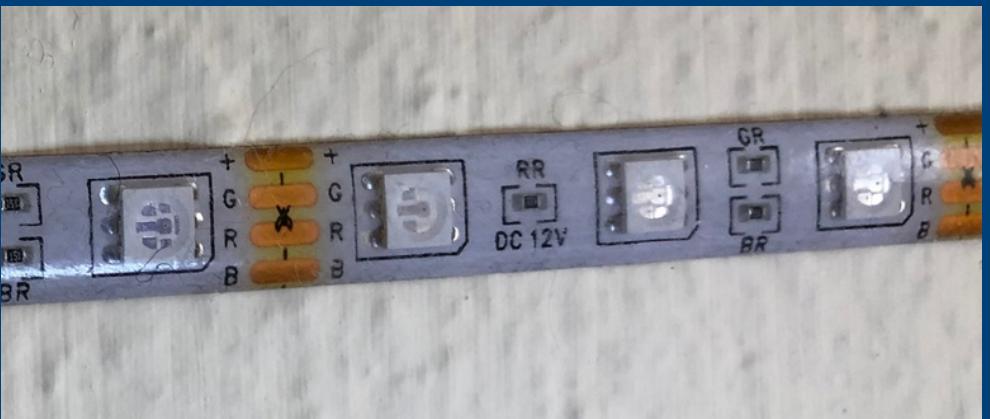
# INTRO

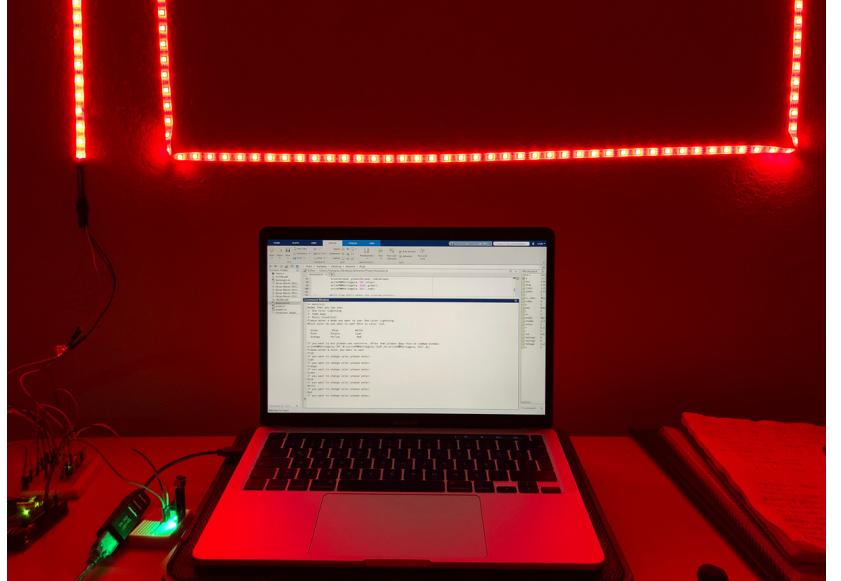
In the end of this project, we will see how Led strip, Arduino and Matlab are working together without any issues. Also, this project helps you in different situation for instance, when you just have some free time and want to listen something good with a suitable atmosphere or when you just want some color and light while working, this project can be best for you!

# HOW IT WORKS?

There are not many functions I used. I just arranged functions according to my needs. So that, I created this project properly.

- arduino('....')
- writePWMVoltage(a,'D9',0)
- readVoltage(a,'A0')
- pause(n)



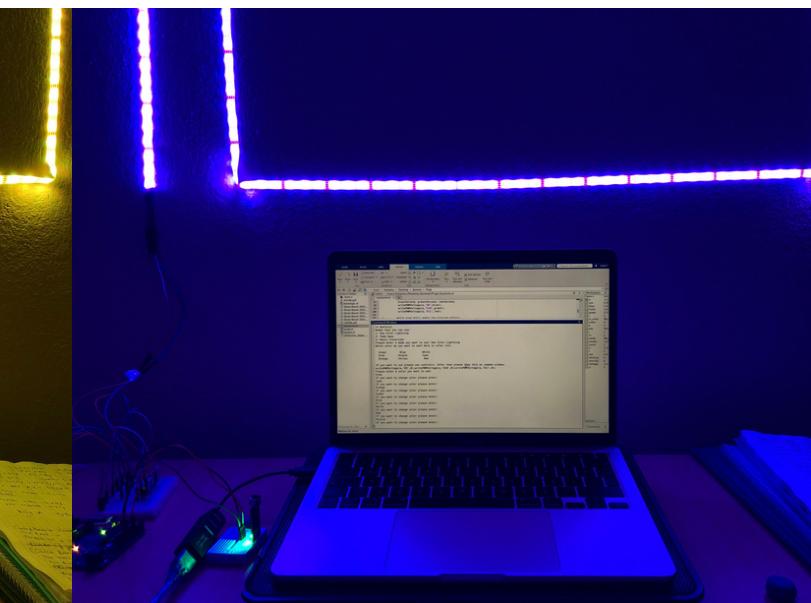
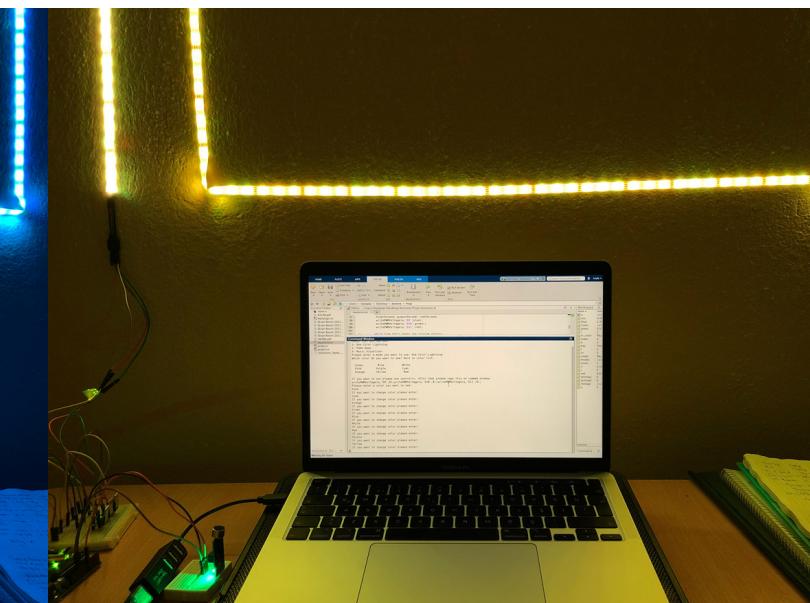
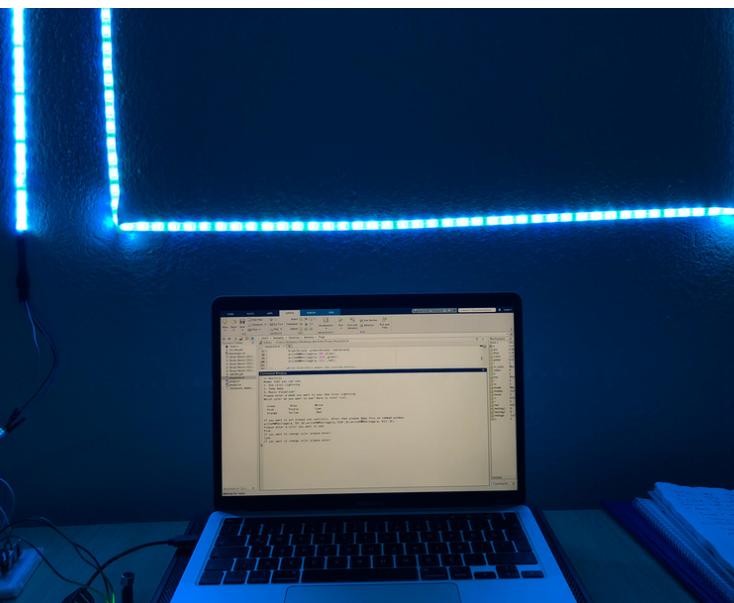
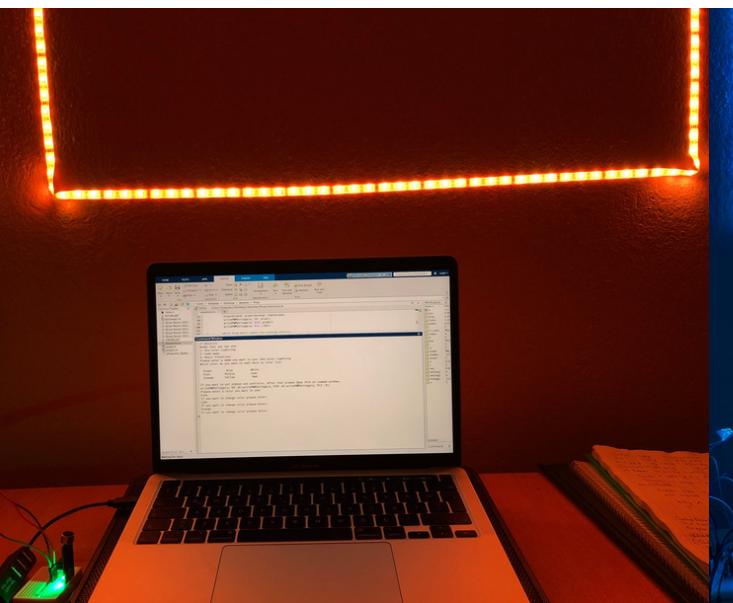
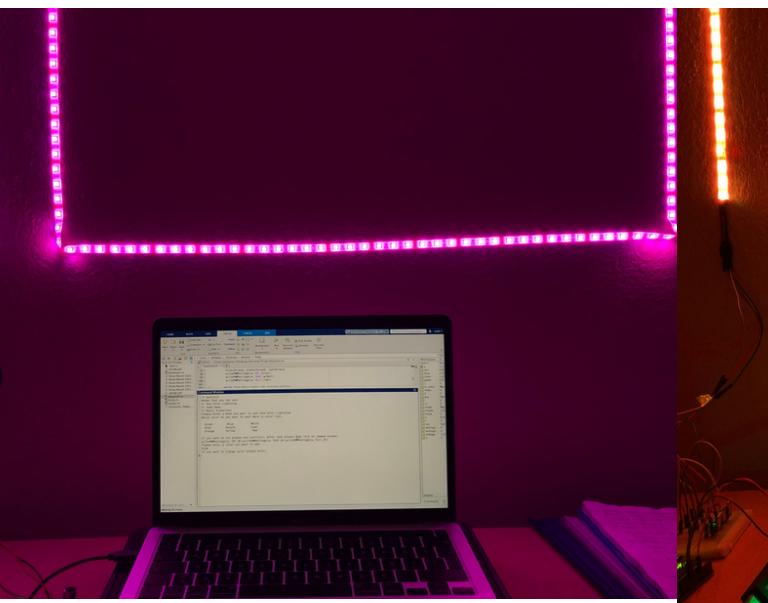


# THE FIRST CASE ONE COLOR LIGHTNING

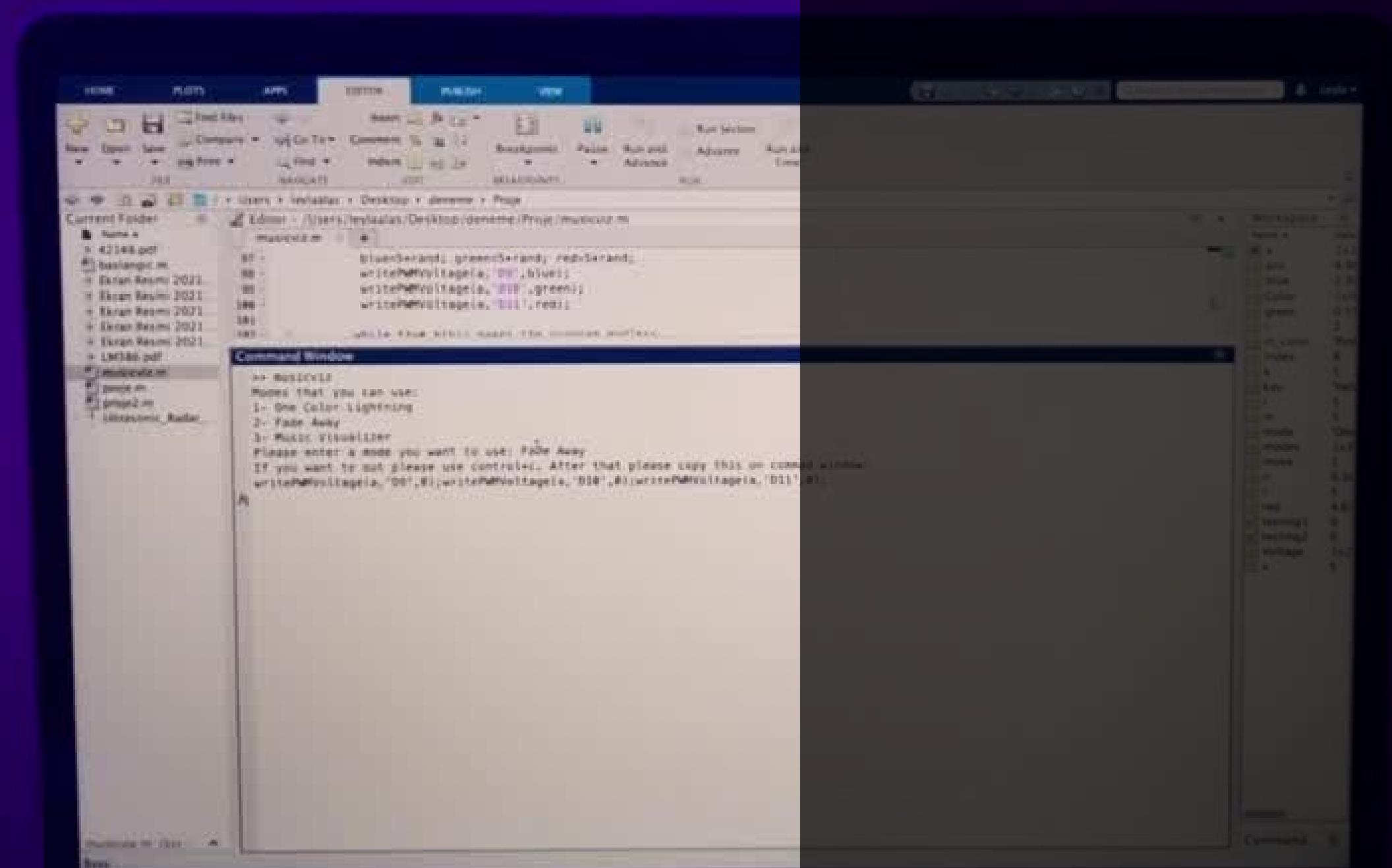
With this part of the project, I aimed to have the ambient lighting according to our wishes. Sometimes, we want to see different colors of lights in our rooms. So, I designed the code with 9 different colors. Here is the color list:

GREEN    BLUE    RED    WHITE    PINK

PURPLE    CYAN    ORANGE    YELLOW



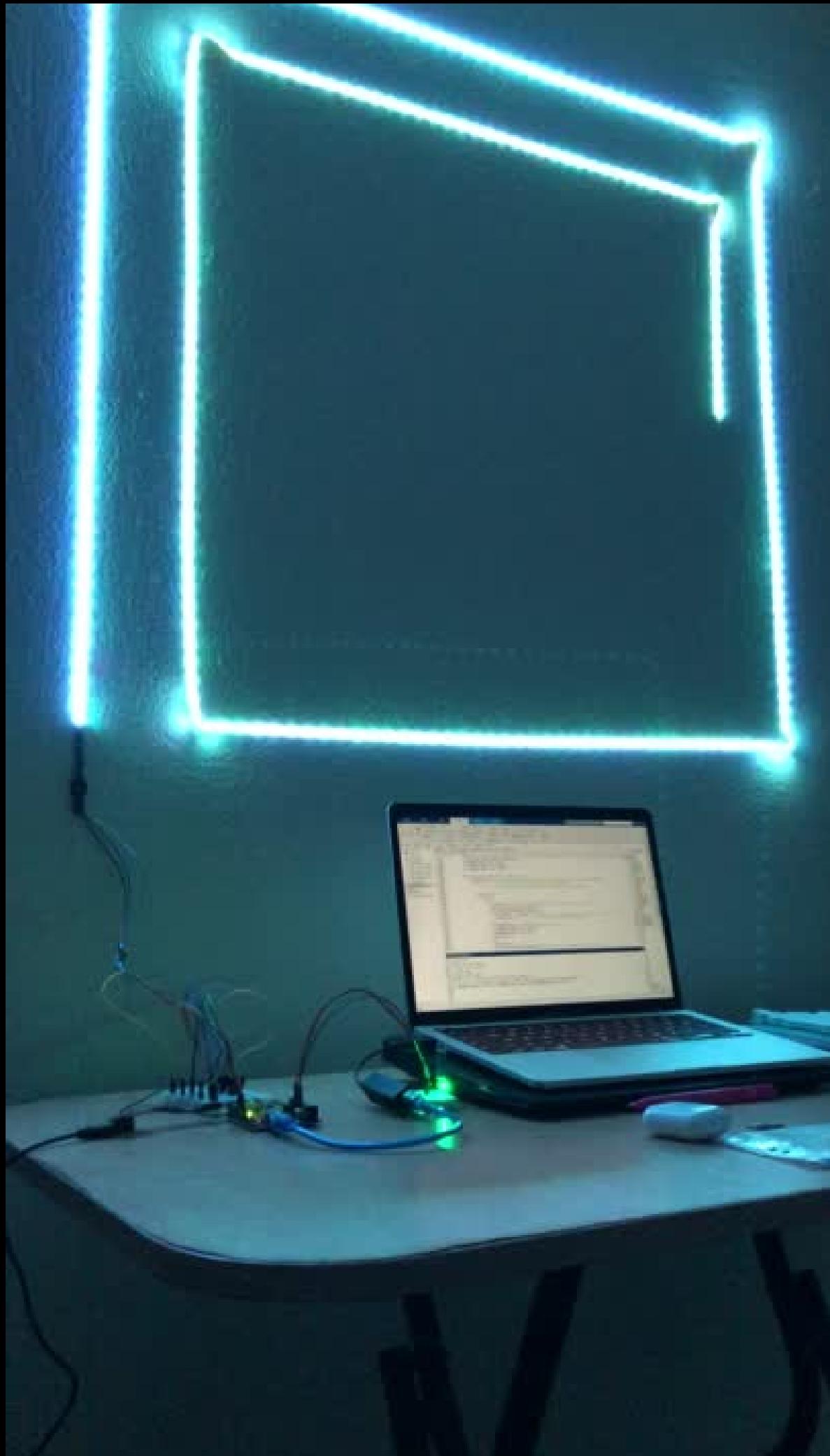
# FADE AWAY



Fade Away is the second mode of this project.

I thought it would be fun if I add a mode like this.

I also thought about playing games. Recently, it is common to use this mode while playing video games. You can see this lightning on headsets, mouses and keyboards. If I use this Led strip like this, I can see the mode behind my computer.



## MUSIC VISUALIZER

This part is the main goal of the project. At the beginning, it was hard to find a method that provide communication from sensor to Led. Then, I use voltages to control Led colors and sound impulses.

Here is an other  
example video.



# While finishing

It was fun. While preparing and learning different subjects, I enjoyed.

It was hard but I was still enjoying. I will use this project I am pretty sure.

To search new subjects and developing the project are improved my skills, especially my searching skills.

**THANKS FOR LISTENING**