LAB 5: Cassandra Cabrera and Mike Menendez **Due:** Feb 10, 2020

Summary: For this lab, working with the pixel read in was fun. We were able to use our knowledge of numpy and pillow to make an efficient program that took the pixel numbers and generated the mona lisa picture. We both have experience with this from previous classes and so this lab was fun.

Code:

```
#Authors: Mike Menendez and Cassandra Cabrera
#The purpose of this code is to read in the pixel digits and create the
#Mona Lisa picture using Pillow.
from PIL import Image
import numpy as np


def main():
    # mona = Image.open("mona.dat", "1")
    d = []
    f = open(file="mona.dat", mode="r") #read in from file
    temp = f.readlines()
    #create list of pixels
    for x in temp:
        d.append([int (i) for i in x.replace(";", "").strip().split(" ")])

    d = np.array(d)
    d = d.astype(np.uint8)
    print(d)
    mona = Image.fromarray(d)

    mona.show(title="Mona") #show image

if __name__ == "__main__":
    main()
```