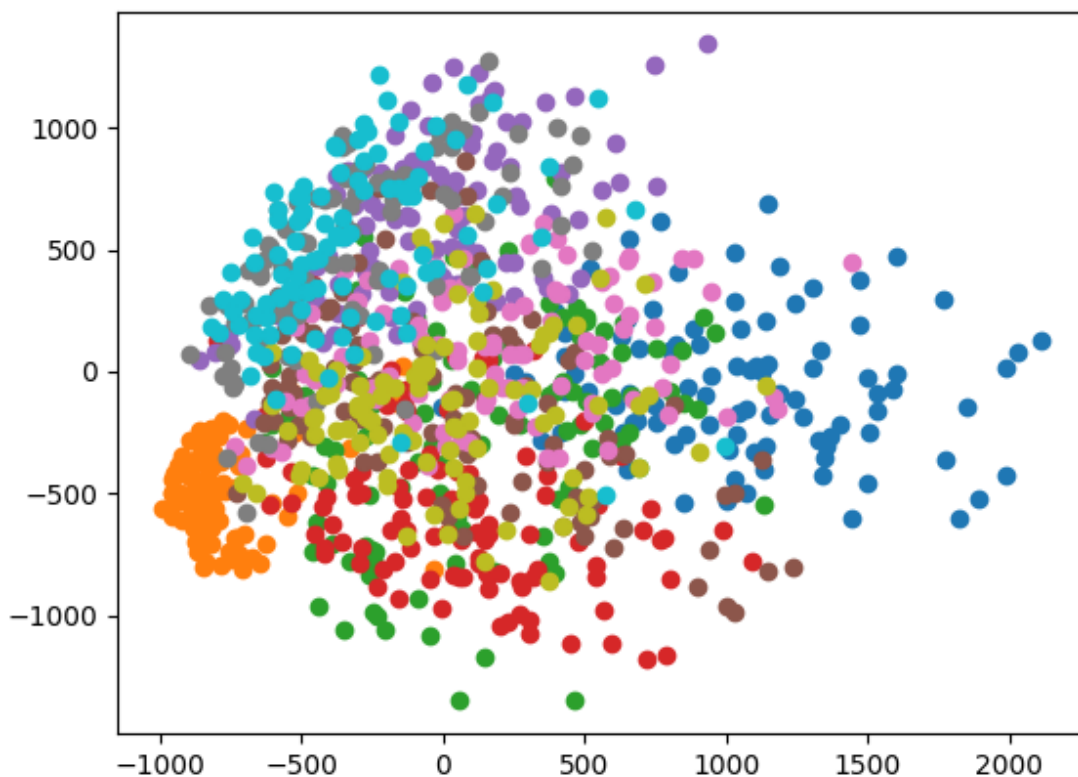


Task One:

In this task, I used pandas, matplotlib, and sklearn to read data from 'MNIST_100.csv' and create a scatterplot of all 10 values within the excel sheet. Pandas specifically read the '.csv' file to create an object that can be used to manipulate the data to remove the label row of data. Using Matplotlib to fit the data to a 2D representation of the data. This data is then broken into data sets, which are represented as different colors, and used to create a scatterplot graph.

Figure 1

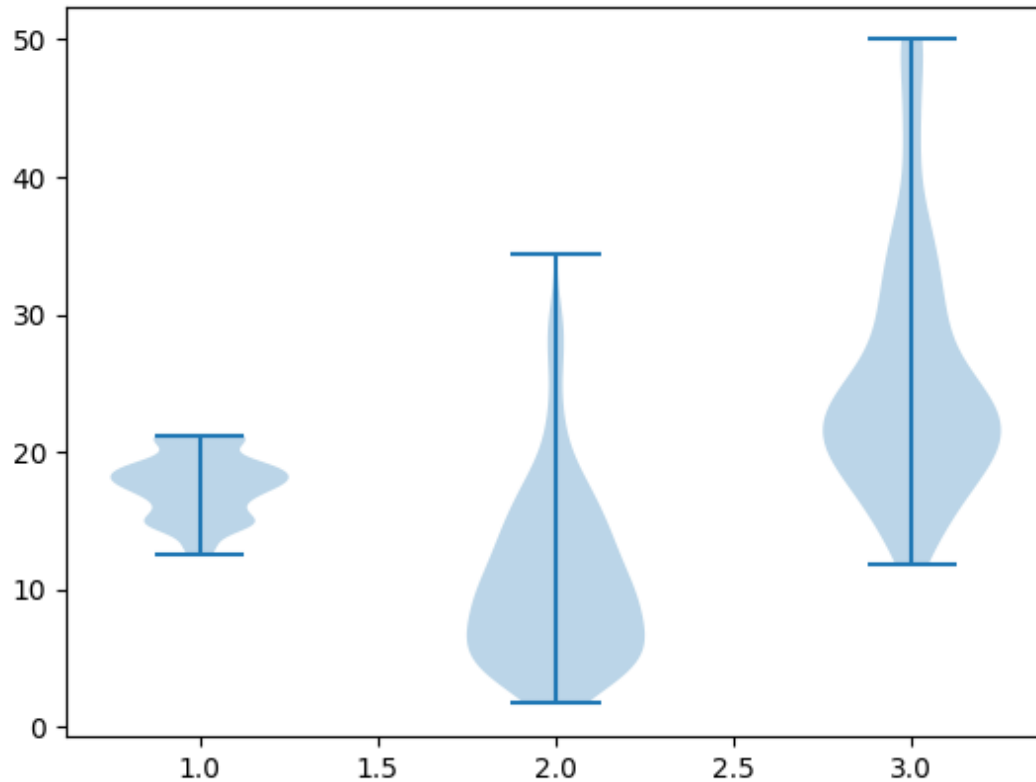


(x, y) = (2207., 1160.)

Task Two:

In this task, I used pandas and matplotlib to read data with no header. Pandas then read columns 10,12,13 (K, M, N). From this data, matplotlib uses the violin plot function to create this diagram representation.

Figure 1



Task Three

In this task, I used pandas and matplotlib to read data with no header. Using pandas to read the file and extract data and matplotlib to create a histogram, as shown below. The histogram plots the data points in a range of 0 to 4 with most of the data being in the 0 to 0.5 range.

