

## Artificial Intelligence

### Project 2


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Sentimental Analysis on Omicron virus – covid 19 tweets

#### 1. Hydrating the tweets using Hydrator app

Add the tweets text file provided in the assignment

 **Datasets** **Add** **Settings**

▼ Add a New Dataset

*Hydrate* a new dataset by selecting a file of tweet identifiers and entering some descriptive information about your new dataset.

Select Tweet ID file

Title:

Creator:

Publisher:

URL:

Add Dataset

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### ▼ Your Datasets

Start and Stop hydration as needed. Hydrator will manage your *Twitter API Rate Limits* for you. Click on the dataset for details.

#### May

35,756 of 35,756 ids read (32,416)

[CSV](#)[Delete](#)

#### April

91,587 of 91,587 ids read (83,238)

[CSV](#)[Delete](#)

#### March

97,844 of 97,844 ids read (88,706)

[CSV](#)[Delete](#)

#### February

89,080 of 89,080 ids read (81,693)

[CSV](#)[Delete](#)

#### January

92,860 of 92,860 ids read (86,232)

[CSV](#)[Delete](#)

#### December

99,288 of 99,288 ids read (92,701)

[CSV](#)[Delete](#)

#### November

16,471 of 16,471 ids read (15,258)

[CSV](#)[Delete](#)

Downloaded the csv files to the local directory.

## 2. Python code explanation.

This Python code combines multiple CSV files into a single CSV file using Pandas.

It performs sentiment analysis on a set of tweets. It first defines a function `clean_text` to clean the text by removing URLs, mentions, hashtags, emojis, punctuation, and stopwords, and lemmatizing words. This function is then applied to the "text" column of a pandas DataFrame called `tweets_df`, and the resulting cleaned text is stored in a new column called "text\_processed".

Next, the code counts the number of positive, negative, and neutral tweets in the `tweets_text` DataFrame, and creates a pie chart to visualize the results. The pie chart is displayed using the `matplotlib.pyplot` library. The chart shows the proportion of positive, negative, and neutral tweets, labeled and colored accordingly.

## Sentiment Analysis Results

