**Step by step procedure to execute the code**

**Here's a small report on how to execute the code in detail with comments:**

GraphText GCN: Execution Guide

**Introduction:**

This guide provides step-by-step instructions on how to execute the code for the "GraphText GCN: Learning from Graph and Text for Predictive Analysis using Graph Convolutional Networks"

**Prerequisites:**

Before proceeding, make sure you have the following prerequisites installed:

Python (version 3.11)

Required Python packages

1. pandas
2. numpy
3. networkx
4. scikit-learn
5. torch
6. matplotlib
7. nltk
8. tfidf
9. Bert-tokenizer

**Dataset files:** convenceme\_merged\_with\_Stance\_and\_postcount.csv

CreateDebate\_Merged\_with\_Stance\_ids.csv

**Execution Steps:**

1. *File Structure:*

Ensure that the project folder contains the following files and folders:

datasets/

TensorFiles/

GCNModel.py

LoadFeatures.py

LoadGraph.py

main.py

1. *Set up the Environment:*

Open a terminal or command prompt.

Navigate to the project folder using the `cd` command.

1. *Install Dependencies:*

Make sure you have Python installed on your system. You can download the latest version from the official Python website (<https://www.python.org/downloads/>).

Make sure your computer shows Pycharm or Vs code to execute the code.

Otherwise install pycharm from <https://www.jetbrains.com/pycharm/download/?section=windows>

After successfully installing Software, Open the Folder ( MINI-PROJECT ).

Setup the python interpreter as default.

1. *Execute the Code:*

In the terminal or command prompt, run the following command to execute the code:

python main.py

1. *Review the Output:*

The code will execute the following steps, as indicated by comments in the code:

Load and process the graph data:

Graph data will be loaded from the dataset using the ‘LoadGraph’ class.

The graph will be drawn based on post IDs.

The graph data will be converted into tensors.

The tensor files will be saved in the ‘TensorFiles’ folder.

Load and process the text-based features:

Text-based features will be loaded from the dataset using the `LoadFeatures` class.

The features will undergo preprocessing.

The features will be converted into vector representations and saved as tensor files.

Initialize and run the GCN model:

The GCN model will be initialized using the `GCNModel` class.

The GCN model will be executed.

1. *Analyze the Results:*

After executing the code, review the generated outputs and any printed information or errors in the terminal or command prompt.

Check the `TensorFiles` folder for saved tensor files.

1. *Conclusion:*

You have successfully executed the code for the "GraphText GCN".