Setup Instructions for Inductive Logic Programming (ILP) Implementation

Prerequisites

- Ensure you have Python and Jupyter Notebook installed on your machine.
- Ensure you have SWI-Prolog installed. You can download it from the SWI-Prolog website.

Steps to Run ILP Algorithm

1. **Unzip the Folder**

   - Unzip the provided folder containing the datasets and Jupyter notebook.

2. **Load Jupyter Notebook**

   - Open a terminal or command prompt.
   - Navigate to the directory where the folder was unzipped.
   - Launch Jupyter Notebook by typing: 'jupyter notebook'
   - Open the notebook file (MLDM_Stroke_Prediction_Coursework.ipynb).

3. **Run Cells in Jupyter Notebook**

   - Execute all cells in the notebook sequentially. This will:

     - Preprocess the dataset for ILP.
     - Import the PyGol library.
     - Extract background.pl, positive, and negative examples using the PyGol library.

4. **Prepare for Prolog Execution**

   - After running all cells, ensure that BK.pl, pos_examples.f, and neg_examples.n files are generated in the working directory.

5. **Run SWI-Prolog**

   - Open a terminal or command prompt.
   - Navigate to the directory where the Prolog files are located.
   - Start the SWI-Prolog interpreter by typing: 'swipl'
   - Load the background knowledge file by typing: 'consult('background.pl').'
   - Induce the logic program by typing: 'induce.'

Notes

- Ensure that all file paths used in the Jupyter notebook and Prolog commands are correct and point to the appropriate files in your directory.
- If you encounter any issues, verify that all necessary libraries and dependencies are installed and properly configured.
