

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_Telco_Chern_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.
-