

DATA MINING ENDSEM

ANOMALY DETECTION

Requirements:

- Python version 3.8 or 3.9
- **Python Libraries needed:**
 - Pandas
 - Numpy
 - scikit-learn

Submission Structure:

- 1) anomaly-s145.dat : Dataset provided by professor.
- 2) answer-s145.dat : output file containing mask signifying whether a data point is anomaly or not .
- 3) anomaly_endsem.py : Python script that takes input file and outputs 'answer-s145.dat' containing 100x100 mask signifying whether a data point is anomaly or not.
- 4) requirements_anomaly.txt: Contains all the python library names required to successfully run given python script.
- 5) anomaly-s145.sh: Shell script file to execute python script.
- 6) Makefile: Installs required python libraries if not already installed and calls anomaly-s145.sh
- 7) Readme.pdf : Contains details about assignment and steps to run the assignment.

Steps To Execute Assignment:

1. Move into the folder where 'Makefile' is present and open Terminal/Command Prompt etc.
2. Type 'make setup' and press enter.
3. Type 'make run ' and press enter.
4. 'answer-s145.dat' will be generated and stored in the folder.