

AIN427 Int. to Data Mining Midterm Exam

- Takehome
- Due Date: December 4th send a PDF file huaincehw@gmail.com with the exact subject **AIN427MIDTERM**
- Do your own work, AI generated text check will be done for all files

Question 1: Data Preprocessing (40 points)

- a. Discuss the importance of data preprocessing in the context of data mining.
- b. Explain three common techniques used in data preprocessing, providing a brief example for each.

Question 2: Association Rule Mining (60 points)

- a. Explain the concept of association rule mining and its application in real-world scenarios.
- b. Discuss the ECLAT algorithm. How does it work, and what are its key steps?
- c. Discuss the Direct Hashing and Pruning (DHP) algorithm. How does it work, and what are its key steps?
- d. Provide an example of a dataset where association rule mining could be beneficial. Describe the potential rules that might be discovered.