Big Data Assignment

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CSE-D

1. Write a Python Program to implement vertical mining Algorithm for generating Association rules

Consider “transactions3.txt” file having 10,000 transactions as input (which you have created in one of your earlier labs).

Hint: import the package called “pyECLAT”

The output is the list of association rules of the from X->Y.

Code:

import pyECLAT

def load\_dataset(file\_path):

transactions = []

with open(file\_path, 'r') as file:

for line in file:

transaction = set(map(int, line.strip()[1:-1].split(',')))

transactions.append(transaction)

return transactions

def generate\_association\_rules(input\_file):

transactions = load\_dataset(input\_file)

model = pyECLAT.pyECLAT(data=transactions, verbose=True)

model.mining()

association\_rules = model.get\_assoc\_rules()

for rule in association\_rules:

X, Y, \_, \_ = rule

print(f"{set(X)} -> {set(Y)}")

if \_\_name\_\_ == "\_\_main\_\_":

input\_file = "transactions3.txt"

generate\_association\_rules(input\_file)