**사이버보안**

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**Dataset**

Column -> 9 Rows -> 88

테이블이(가) 표시된 사진

자동 생성된 설명

**Code**

import csv  
  
import mlxtend  
import numpy as np  
import pandas as pd  
  
  
with open('IoC.csv', 'r') as f:  
 reader = csv.reader(f)  
 data = list(reader)  
print(data)  
print(type(data))  
  
  
# Apriori  
print("############Apriori############")  
# Apriori  
from mlxtend.preprocessing import TransactionEncoder  
te = TransactionEncoder()  
te\_ary = te.fit(data).transform(data)  
df = pd.DataFrame(te\_ary, columns=te.columns\_)  
print(df)  
  
from mlxtend.frequent\_patterns import apriori  
print(apriori(df, min\_support=0.3, use\_colnames=True))  
  
# FP-Growth  
print("############FP-Growth############")  
# FP-Growth  
from mlxtend.preprocessing import TransactionEncoder  
te = TransactionEncoder()  
te\_ary = te.fit(data).transform(data)  
df = pd.DataFrame(te\_ary, columns=te.columns\_)  
print(df)  
  
from mlxtend.frequent\_patterns import fpgrowth  
print(fpgrowth(df, min\_support=0.3, use\_colnames=True))

**Result**

텍스트이(가) 표시된 사진

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