## INSTRUKSI PRATIKUM MODUL 9

Instruksi Pratikum Modul 9 Menggunakan Data Set "dataapriori_instruksi.csv" Dengan Ketentuan :

Install apriori dan import library yang dibutuhkan.

```
pip install apyori
```

```
Looking in indexes: https://pypi.org/simple, https://us-python.pkg.dev/colab-wheels/public/simple/
Collecting apyori
  Downloading apyori-1.1.2.tar.gz (8.6 kB)
  Preparing metadata (setup.py) ... done
Building wheels for collected packages: apyori
  Building wheel for apyori (setup.py) ... done
  Created wheel for apyori: filename=apyori-1.1.2-py3-none-any.whl size=5973 sha256=1b4e0123426f461823fc4822c5fc9a614b24443a3d8432971b3b1eaa80ffded2
  Stored in directory: /root/.cache/pip/wheels/1b/02/6c/a45230be8603bd95c0a51cd2b289aefdd860c1a100eab73661
Successfully built apyori
Installing collected packages: apyori
Successfully installed apyori-1.1.2
```

```
[ ] import numpy as np
    import matplotlib.pyplot as plt
    import pandas as pd
    from apyori import apriori
```

Panggil data yang akan dipakai.

```
[ ] store_data = pd.read_csv('/content/dataapriori_instruksi.csv')
    store_data.head()
```

Tampilkan info data.

```
[ ] store_data.info
```

Asosiasi menggunakan algoritma apriori.

```
[ ]  records = []
     for i in range(0, len(store_data)):
         records.append([str(store_data.values[i,j]) for j in range(0, 19)])
```

```
[ ]  association_rules = apriori(records, min_support=0.0045, min_confidence=0.2, min_lift=3, min_length=2)
     association_results = list(association_rules)
```

```
[ ]  print(len(association_results))
```

```
[ ]  def association(association_results):
         lhs = [tuple(result[2][0][0])[0] for result in association_results]
         rhs = [tuple(result[2][0][1])[0] for result in association_results]
         support = [result[1] for result in association_results]
         confidence = [result[2][0][2] for result in association_results]
         lift = [result[2][0][3] for result in association_results]
         return list(zip(lhs,rhs,support,confidence,lift))
     ResultDataFrame = pd.DataFrame(association(association_results),columns=('Product 1','Product 2','Support','Confidence','Lift'))
     ResultDataFrame['Rule'] = ResultDataFrame['Product 1'] + '->' + ResultDataFrame['Product 2']
```

```
[ ]  a = ResultDataFrame.sort_values(['Lift'], ascending=False)
     b = a.drop_duplicates(subset=['Product 1', 'Product 2'], keep='first')
     b.head(10)
```