

<https://medium.com/@anishsingh20/logistic-regression-in-python-423c8d32838b>
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In [6]:

```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
%matplotlib inline

import matplotlib.pyplot as plt
import numpy as np
from sklearn.linear_model import LogisticRegression
from sklearn.metrics import classification_report, confusion_matrix
```

In [7]:

```
dataset = pd.read_csv('รวม.csv', index_col=0)
```

In [8]:

```
dataset.shape
```

Out[8]:

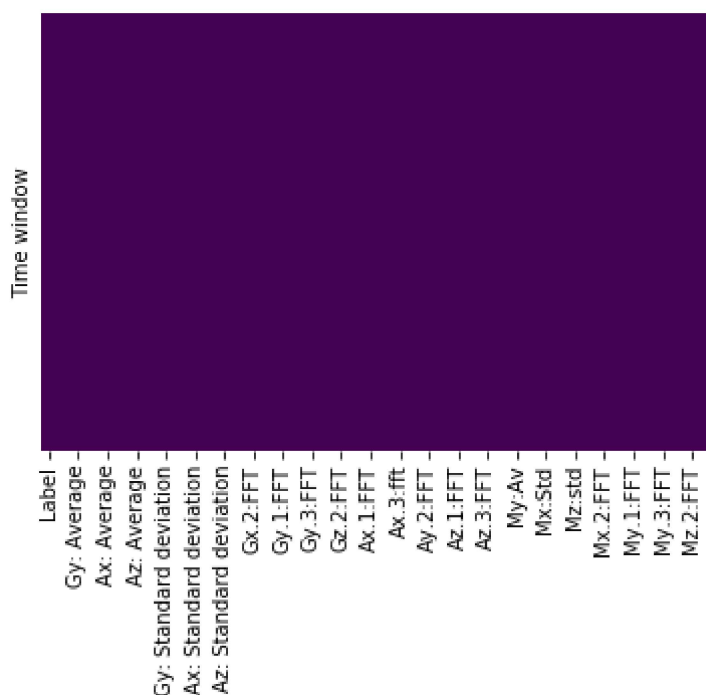
(104, 46)

In [9]:

```
sns.heatmap(dataset.isnull(), yticklabels=False, cbar=False, cmap='viridis')
```

Out[9]:

<matplotlib.axes._subplots.AxesSubplot at 0x1e56d8999c8>



In [10]:

```
X = dataset.drop('Label', axis=1)
y = dataset['Label']
```

In [11]:

```
from sklearn.model_selection import train_test_split
X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=0.3)

#test30%train70%
```

In [12]:

```
from sklearn.linear_model import LogisticRegression
#create an instance and fit the model
logmodel = LogisticRegression()
logmodel.fit(X_train, y_train)
```

D:\Programs\Anaconda3\lib\site-packages\sklearn\linear_model\logistic.py:432: FutureWarning: Default solver will be changed to 'lbfgs' in 0.22. Specify a solver to silence this warning.
FutureWarning)

Out[12]:

```
LogisticRegression(C=1.0, class_weight=None, dual=False, fit_intercept=True,
    intercept_scaling=1, l1_ratio=None, max_iter=100,
    multi_class='warn', n_jobs=None, penalty='l2',
    random_state=None, solver='warn', tol=0.0001, verbose=0,
    warm_start=False)
```

In [13]:

```
#predictions
Predictions = logmodel.predict(X_test)
```

In [14]:

```
from sklearn.metrics import classification_report, confusion_matrix
print(confusion_matrix(y_test, Predictions))

print(classification_report(y_test, Predictions))
```

```
[[18  0]
 [ 0 14]]
```

	precision	recall	f1-score	support
Eat	1.00	1.00	1.00	18
Sleep	1.00	1.00	1.00	14
accuracy			1.00	32
macro avg	1.00	1.00	1.00	32
weighted avg	1.00	1.00	1.00	32

In []: