DDOS using Decision Tree

```
#1. Training
import pandas as pd
DDOS=pd.read_csv("/content/final_dataset1.csv")
x= DDOS[[' Protocol', 'Total Length of Fwd Packets', ' Total Fwd Packets', ' Total
y= DDOS[[' Label']]
#algorithm(decision tree)
from sklearn.tree import DecisionTreeClassifier
ML=DecisionTreeClassifier()
#fit data
ML=ML.fit(x,y)
#testing
result=ML.predict([[16,24,4, 460]])
print(result)
    ['NetBIOS']
    /usr/local/lib/python3.7/dist-packages/sklearn/base.py:446: UserWarning: X dc
       "X does not have valid feature names, but"
```

DDOS using Naive Bayes classifier

```
#1.TRAINING
#LOAD DATA
import pandas as pd
DDOS=pd.read csv("/content/final dataset1.csv")
X=·DDOS[['·Protocol', ·'Total·Length·of·Fwd·Packets', ·'·Total·Fwd·Packets', ·'·Total
Y = DDOS[['Label']]
#ALGORITHM
from sklearn.naive_bayes import GaussianNB
ML1=GaussianNB()
from sklearn.naive_bayes import MultinomialNB
ML2=MultinomialNB()
from sklearn.naive_bayes import BernoulliNB
ML3=BernoulliNB()
#FIT DATA
ML1=ML1.fit(X,Y)
ML2=ML2.fit(X,Y)
ML3=ML3.fit(X,Y)
#2.TESTING
result1=ML1.predict([[16,24,4,2]])
print("Prediction using GUASSIAN NB=",result1)
result2=ML2.predict([[16,24,4,2]])
print("Prediction using MULTINOMIAL NB=",result2)
result3=ML3.predict([[16,24,4,2]])
print("Prediction using BERNOULLI NB=",result3)
```

DDOS using Support Vector Machine

```
#1.TRAINING
#LOAD DATA
import pandas as pd
DDOS=pd.read_csv("/content/final_dataset1.csv")
x= DDOS[[' Protocol', 'Total Length of Fwd Packets', ' Total Fwd Packets', ' Total
y=DDOS[[' Label']]
#ALGORITHM
from sklearn.svm import SVC
ML=SVC()
#FIT DATA
ML=ML.fit(x,y)
#2.TESTING
result=ML.predict(x)
from sklearn.metrics import accuracy score
accuracy_score(result,y)
    /usr/local/lib/python3.7/dist-packages/sklearn/utils/validation.py:985: Data(
      y = column or 1d(y, warn=True)
    0.6310679611650486
```

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