

# MACHINE LEARNING LABORATORY

## 1818128\_JAYASREE T

☆ EXP 2 : Predict whether the person is a male or female using Naive bayes algorithm

### Importing the Dataset

```
[22] import numpy as np
import pandas as pd
ds = pd.read_csv('gender.csv')
ds.head()
```

	Gender	Weight	Shoe_size
0	Male	176.36960	17.460317
1	Male	154.32340	17.063492
2	Female	132.27720	15.079365
3	Female	119.04948	14.682540
4	Male	143.30030	15.873016



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## ▼ Categorising Features(X) and target(y) variables

```
[10] X=ds.iloc[:,[1,2]].values  
     y=ds.iloc[:,[0]].values
```

## ▼ Splitting Dataset into training and testing sets

```
[5] from sklearn.model_selection import train_test_split  
     X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=0.1, random_state=0)
```

## ▼ Training the model

```
[16] from sklearn.naive_bayes import GaussianNB  
     classifier=GaussianNB()  
     classifier=classifier.fit(X_train,y_train.ravel())
```

## ▼ Accuracy of Model

```
[21] y_pred = classifier.predict(X_test)
```

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colab.research.google.com/drive/1\_Tk2-9LJ\_bmK-fbrOFIVbu3zYLFU2Mmg#scrollTo=kubpys2b5hCT

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Accuracy of Model

```
[21] y_pred = classifier.predict(X_test)
      from sklearn.metrics import accuracy_score
      print("Accuracy: ",accuracy_score(y_pred,y_test))

Accuracy:  1.0
```

Making predictions

```
[17] print(classifier.predict([[132.2772,15.837302]]))

['Female']
```

If the weight is 132.2772 and the shoe size is 15.837302, then the Gender is FEMALE.