

```

##### Test on Generative Data #####
Training Data
      precision    recall  f1-score   support

      0.0         0.95      0.98      0.96     8122
      1.0         0.99      0.95      0.97     8708

   accuracy          0.97     16830
  macro avg          0.97      0.97     16830
 weighted avg          0.97      0.97     16830

Test Data
      precision    recall  f1-score   support

      0.0         0.93      0.96      0.95     1060
      1.0         0.96      0.93      0.95     1140

   accuracy          0.95     2200
  macro avg          0.95      0.95     2200
 weighted avg          0.95      0.95     2200

Validation Data
      precision    recall  f1-score   support

      0.0         0.94      0.97      0.96     1405
...
  macro avg          0.96      0.96      0.96     2970
 weighted avg          0.96      0.96      0.96     2970

##### Test on Nomal Data #####
Training Data
      precision    recall  f1-score   support

      0.0         0.76      0.92      0.83      113
      1.0         0.64      0.33      0.43      49

   accuracy          0.70     162
  macro avg          0.70      0.62      0.63     162
 weighted avg          0.72      0.74      0.71     162

Test Data
      precision    recall  f1-score   support

      0.0         0.82      0.92      0.87      36
      1.0         0.62      0.42      0.50      12

   accuracy          0.79      48
  macro avg          0.72      0.67      0.68      48
 weighted avg          0.78      0.79      0.78      48

Validation Data
      precision    recall  f1-score   support

      0.0         0.83      0.91      0.87      22
...
  macro avg          0.72      0.67      0.68      29
 weighted avg          0.78      0.79      0.78      29

```

## Decision Tree

```

##### Test on Oversampled Data #####
Training Data
      precision    recall  f1-score   support

      0.0         0.79      0.69      0.74     4176
      1.0         0.64      0.75      0.69     3049

   accuracy          0.71     7225
  macro avg          0.71      0.72      0.71     7225
 weighted avg          0.73      0.71      0.72     7225

Test Data
      precision    recall  f1-score   support

      0.0         0.79      0.69      0.74      855
      1.0         0.65      0.76      0.70      645

   accuracy          0.72     1500
  macro avg          0.72      0.73      0.71     1500
 weighted avg          0.73      0.72      0.72     1500

Validation Data
      precision    recall  f1-score   support

      0.0         0.78      0.66      0.72      729
...
  macro avg          0.70      0.71      0.70     1275
 weighted avg          0.71      0.70      0.70     1275

##### Test on SMOTE Data #####
Training Data
      precision    recall  f1-score   support

      0.0         0.85      0.73      0.78     4214
      1.0         0.68      0.82      0.74     3011

   accuracy          0.77     7225
  macro avg          0.77      0.77      0.76     7225
 weighted avg          0.78      0.77      0.77     7225

Test Data
      precision    recall  f1-score   support

      0.0         0.85      0.71      0.77      898
      1.0         0.65      0.81      0.72      602

   accuracy          0.75     1500
  macro avg          0.75      0.76      0.74     1500
 weighted avg          0.77      0.75      0.75     1500

Validation Data
      precision    recall  f1-score   support

      0.0         0.85      0.68      0.76      770
...
  macro avg          0.74      0.75      0.73     1275
 weighted avg          0.76      0.74      0.74     1275

##### Test on ADASYN Data #####
Training Data
      precision    recall  f1-score   support

      0.0         0.67      0.59      0.63     4124
      1.0         0.53      0.62      0.57     3102

   accuracy          0.60     7226
  macro avg          0.60      0.61      0.60     7226
 weighted avg          0.61      0.60      0.61     7226

Test Data
      precision    recall  f1-score   support

      0.0         0.69      0.60      0.64      857
      1.0         0.54      0.64      0.59      644

   accuracy          0.62     1501
  macro avg          0.62      0.61      0.61     1501
 weighted avg          0.63      0.62      0.62     1501

Validation Data
      precision    recall  f1-score   support

      0.0         0.71      0.62      0.66      731
...
  macro avg          0.64      0.64      0.64     1276
 weighted avg          0.65      0.64      0.64     1276

```

# Random Forest

## Generative Data

##### Test on Generative Data #####				
Training Data				
	precision	recall	f1-score	support
0.0	0.99	1.00	0.99	8385
1.0	1.00	0.99	0.99	8445
accuracy			0.99	16830
macro avg	0.99	0.99	0.99	16830
weighted avg	0.99	0.99	0.99	16830
Test Data				
	precision	recall	f1-score	support
0.0	0.95	0.98	0.96	1066
1.0	0.98	0.95	0.96	1134
accuracy			0.96	2200
macro avg	0.96	0.96	0.96	2200
weighted avg	0.96	0.96	0.96	2200
Validation Data				
	precision	recall	f1-score	support
0.0	0.96	0.97	0.97	1422
...				
macro avg	0.97	0.97	0.97	2970
weighted avg	0.97	0.97	0.97	2970

#####

## Normal Data

##### Test on Normal Data #####				
Training Data				
	precision	recall	f1-score	support
0.0	0.82	0.92	0.86	122
1.0	0.60	0.38	0.46	40
accuracy			0.78	162
macro avg	0.71	0.65	0.66	162
weighted avg	0.76	0.78	0.77	162
Test Data				
	precision	recall	f1-score	support
0.0	0.88	0.90	0.89	39
1.0	0.50	0.44	0.47	9
accuracy			0.81	48
macro avg	0.69	0.67	0.68	48
weighted avg	0.80	0.81	0.81	48
Validation Data				
	precision	recall	f1-score	support
0.0	0.83	0.87	0.85	23
...				
macro avg	0.62	0.60	0.61	29
weighted avg	0.74	0.76	0.75	29

#####

## Oversampled Data

##### Test on Oversampled Data #####				
Training Data				
	precision	recall	f1-score	support
0.0	0.83	0.65	0.73	4617
1.0	0.56	0.77	0.65	2608
accuracy			0.70	7225
macro avg	0.70	0.71	0.69	7225
weighted avg	0.73	0.70	0.70	7225
Test Data				
	precision	recall	f1-score	support
0.0	0.83	0.66	0.74	939
1.0	0.58	0.78	0.66	561
accuracy			0.71	1500
macro avg	0.71	0.72	0.70	1500
weighted avg	0.74	0.71	0.71	1500
Validation Data				
	precision	recall	f1-score	support
0.0	0.83	0.64	0.72	800
...				
macro avg	0.69	0.71	0.69	1275
weighted avg	0.73	0.69	0.70	1275

#####

## SMOTE Data

##### Test on SMOTE Data #####				
Training Data				
	precision	recall	f1-score	support
0.0	0.88	0.69	0.77	4679
1.0	0.59	0.84	0.69	2546
accuracy			0.74	7225
macro avg	0.74	0.76	0.73	7225
weighted avg	0.78	0.74	0.74	7225
Test Data				
	precision	recall	f1-score	support
0.0	0.88	0.67	0.76	988
1.0	0.56	0.83	0.67	512
accuracy			0.72	1500
macro avg	0.72	0.75	0.72	1500
weighted avg	0.77	0.72	0.73	1500
Validation Data				
	precision	recall	f1-score	support
0.0	0.90	0.67	0.77	827
...				
macro avg	0.74	0.77	0.73	1275
weighted avg	0.79	0.74	0.75	1275

#####

## ADASYN Data

##### Test on ADASYN Data #####				
Training Data				
	precision	recall	f1-score	support
0.0	0.74	0.58	0.65	4660
1.0	0.45	0.64	0.53	2566
accuracy			0.60	7226
macro avg	0.60	0.61	0.59	7226
weighted avg	0.64	0.60	0.61	7226
Test Data				
	precision	recall	f1-score	support
0.0	0.74	0.57	0.65	967
1.0	0.45	0.63	0.53	534
accuracy			0.60	1501
macro avg	0.60	0.60	0.59	1501
weighted avg	0.64	0.60	0.60	1501
Validation Data				
	precision	recall	f1-score	support
0.0	0.78	0.59	0.67	826
...				
macro avg	0.63	0.64	0.62	1276
weighted avg	0.67	0.63	0.63	1276

#####