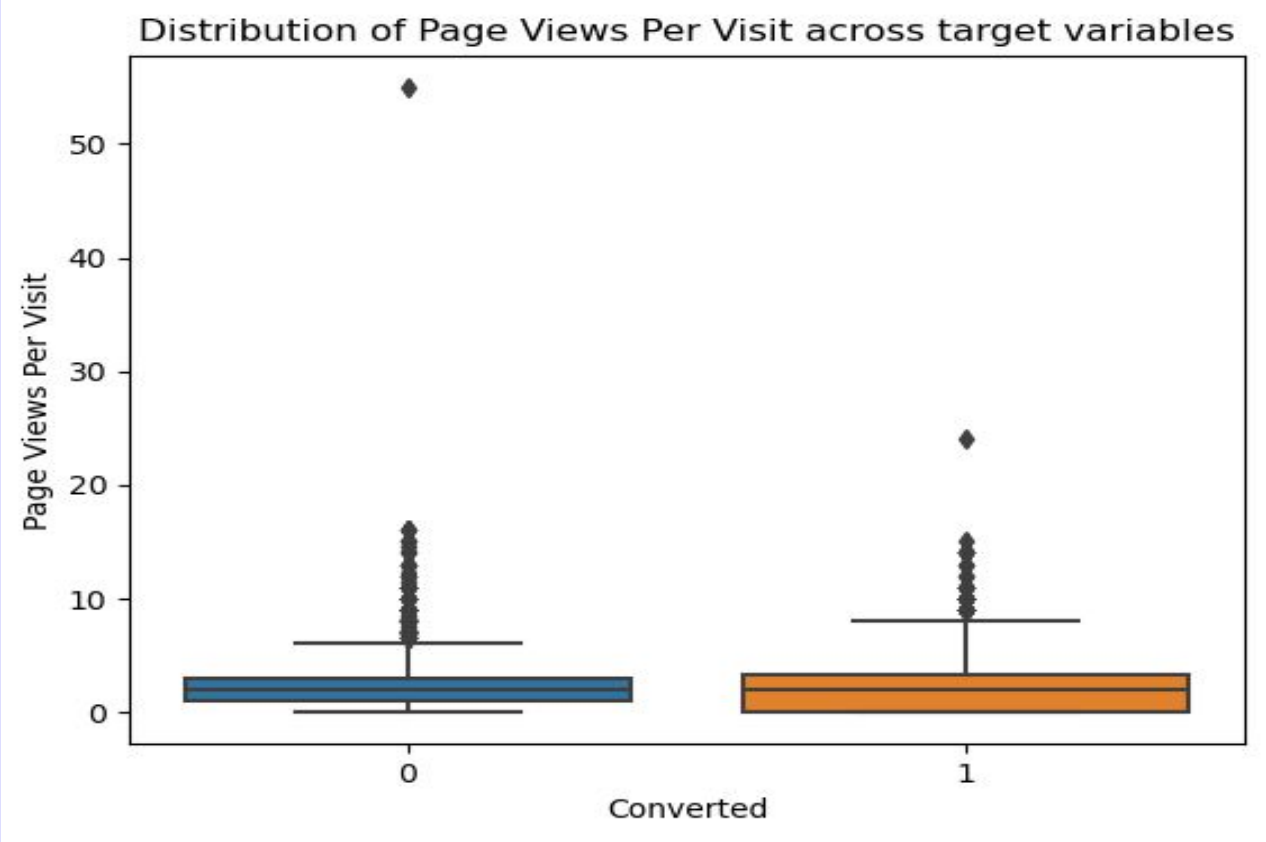
LEAD SCORING

X EDUCATION

There were only few outliers



These outliers were than replaced with there upper bound and lower bound values

Removing Variables with No Variation

Prospect ID

I agree to pay the amount through cheque

Get updates on DM Content

Update me on Supply Chain Content

Receive More Updates About Our Courses

Through Recommendations

Do Not Email

Do Not Call

Search

Magazine

Newspaper Article

X Education Forums

Newspaper

Digital Advertisement

The 15 variables selecting through RFE

	coef	std err	z	P>|z|	[0.025	0.975]
const	-0.3675	160.193	-0.002	0.998	-314.340	313.605
TotalVisits	0.6757	0.079	8.512	0.000	0.520	0.831
Total Time Spent on Website	1.4985	0.046	32.240	0.000	1.407	1.590
Page Views Per Visit	-0.3428	0.056	-6.118	0.000	-0.453	-0.233
Lead Source_Olark Chat	0.5489	0.051	10.863	0.000	0.450	0.648
Lead Source_Reference	1.0037	0.052	19.441	0.000	0.903	1.105
Lead Source_Welingak Website	2.8730	1449.931	0.002	0.998	-2838.939	2844.685
Last Activity_Converted to Lead	-0.1824	0.043	-4.271	0.000	-0.266	-0.099
Last Activity_Email Bounced	-0.3101	0.054	-5.695	0.000	-0.417	-0.203
Last Activity_Olark Chat Conversation	-0.4822	0.050	-9.721	0.000	-0.579	-0.385
Last Activity_Page Visited on Website	-0.2102	0.038	-5.461	0.000	-0.286	-0.135
Last Activity_Unreachable	-0.1674	0.058	-2.874	0.004	-0.282	-0.053
A free copy of Mastering The Interview_Yes	-0.1822	0.037	-4.871	0.000	-0.256	-0.109
Last Notable Activity_Had a Phone Conversation	0.1514	0.048	3.174	0.002	0.058	0.245
Last Notable Activity_SMS Sent	0.6698	0.035	18.953	0.000	0.600	0.739
Last Notable Activity_Unreachable	0.2413	0.049	4.941	0.000	0.146	0.337

Accuracy, Specificity and Sensitivity of the model

[247]:
```
# Let's check the accuracy
print(metrics.accuracy_score(y_train_pred_final.Converted, y_train_pred_final.Predicted))
```

```
0.8124613481756339
```

[ ]:

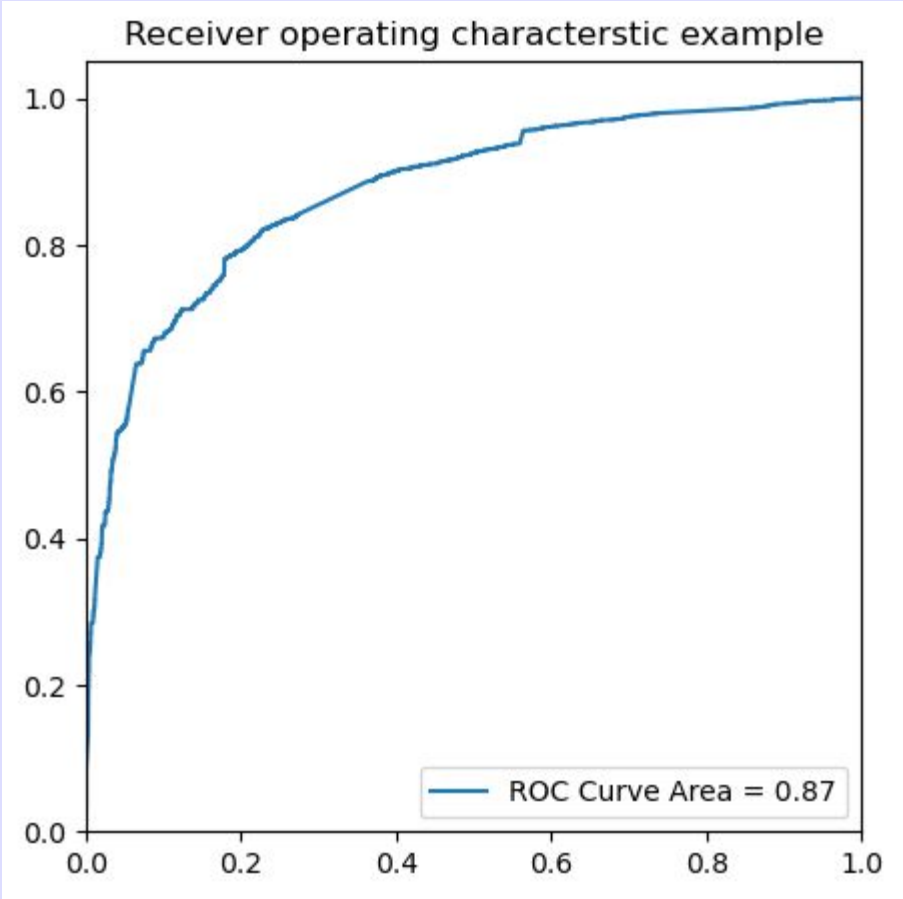
[249]:
```
TN, FP, FN, TP = confusion.ravel()
```

[251]:
```
# Sensitivity
TP/(TP + FN )
```

[251]:
```
0.6972624798711755
```

[253]:
```
# Specificity
TN / (TN + FP)
```

[253]:
```
0.8842871485943775
```


Receiver operating characterstic example
1.0
0.8
0.6
0.4
0.2
0.0
0.0
0.2
0.4
0.6
0.8
1.0
ROC Curve Area = 0.87

Precision and Recall on test data set

```
TN, FP, FN, TP = confusion.ravel()
# Sensitivity  and # Specificity
print(f"Sensitivity : {TP/(TP + FN ) } and Specificity : {TN / (TN + FP)}")
```

```
Sensitivity : 0.6982358402971216 and Specificity : 0.8766961651917404
```

```
# Precision
TP/(TP+FP)
```

```
0.7825182101977107
```

```
# Recall
TP/(TP+FN)
```

```
0.6982358402971216
```