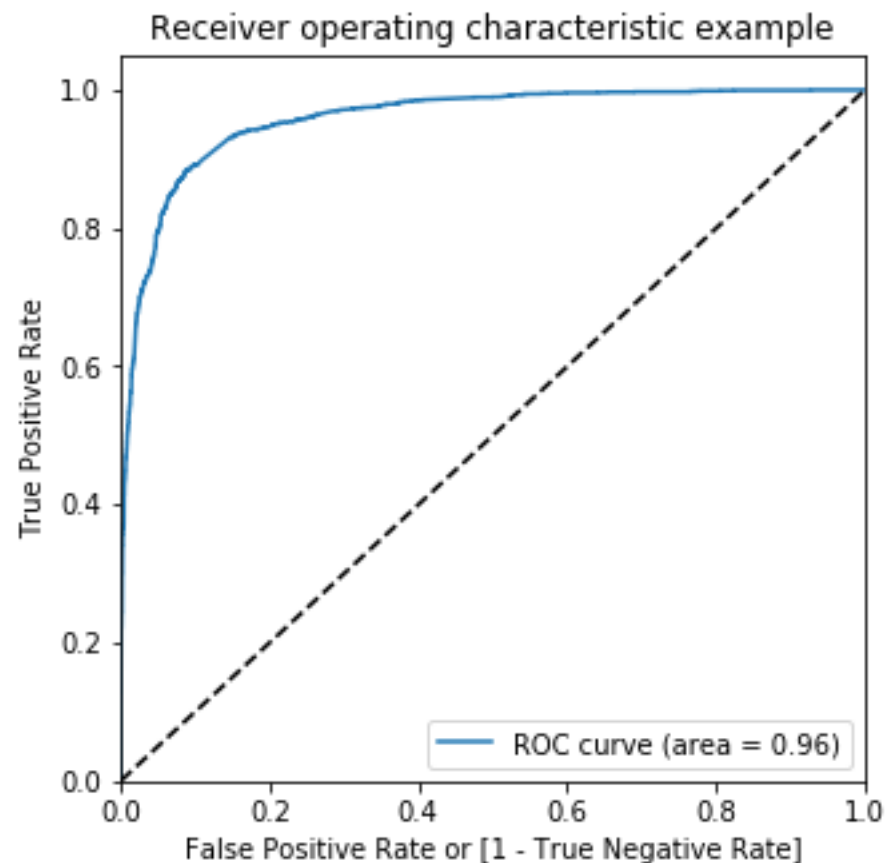


ASSIGNMENT

ROC CURVE

ROC is a probability curve and AUC represents degree or measure of separability.

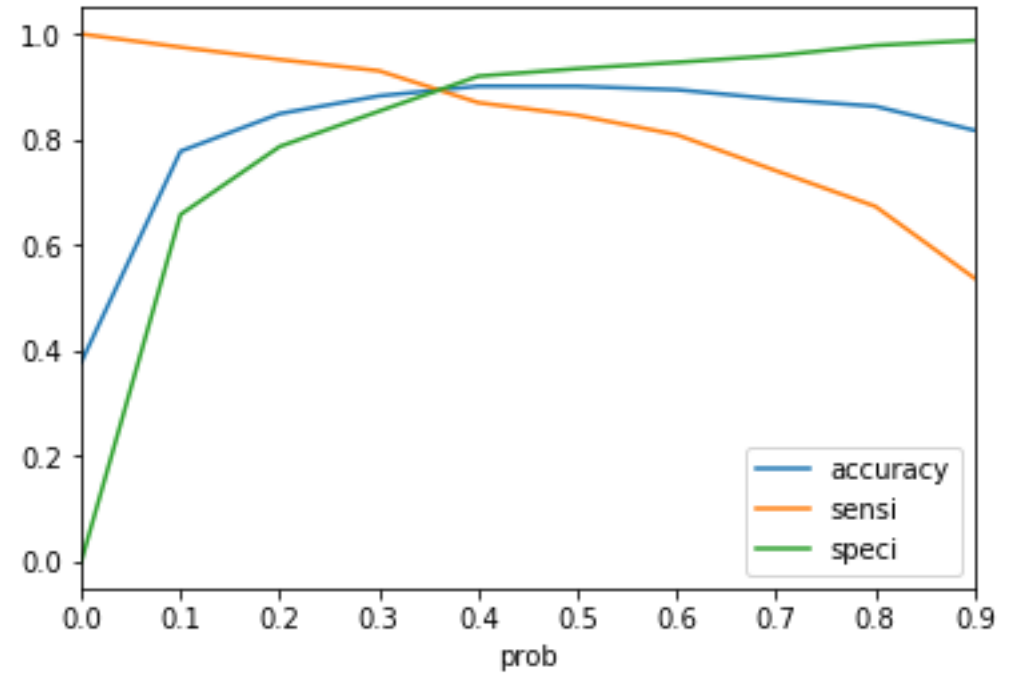
Higher the AUC, better the model is at predicting 0s as 0s and 1s as 1s



CUT – OFF

A higher **cut-off** setting results in higher **specificity** and lower **sensitivity** and vice versa.

Through the cut-off curve we take cut off value as 0.4 and followed the metrics.



LEAD SCORE

The customers with higher lead score have a higher conversion chance and the customers with lower lead score have a lower conversion chance.

Out[199]:

	LeadID	Lead Score
4326	1758	1.000000e+02
1225	983	1.000000e+02
1187	1682	1.000000e+02
4334	350	1.000000e+02
90	7476	1.000000e+02
5399	373	1.000000e+02
575	6200	1.000000e+02
2025	6632	1.000000e+02
3910	8874	1.000000e+02
1536	459	1.000000e+02
4717	220	1.000000e+02
2577	1568	1.000000e+02
3268	7220	1.000000e+02
3506	2013	1.000000e+02
338	7211	9.999996e+01
3099	8213	9.999991e+01
3479	4613	9.999975e+01
4126	3716	9.999974e+01
4762	7187	9.999962e+01
314	2984	9.999899e+01
2109	4123	9.999898e+01
2795	1559	9.999887e+01
2921	7501	9.999887e+01
190	2961	9.999884e+01
127	8749	9.999840e+01
5707	2495	9.999833e+01
2149	7214	9.999782e+01
2355	448	9.999782e+01

Lead Case Study.docx Lead_Scoring_Ca...ipy... Pima+Diabetes.ipynb

ANALYSIS AND RECOMMENDATIONS

1. With 0.89 Conversion rate, the model has been built with the conversion probability of 0.40 and taking Tags, Lead Origin and Country as the most important factors behind the conversion.
2. If X education focusses on these factors, they will be able to increase the hot leads number.
3. With these model the company will be to able meet conversion rate of 0.8 successfully.
4. By marketing more in most trending Lead Origin(e.g. Google, Facebook etc) or communicating more with the SMS mode amongst people will the X Education to increase there leads.
5. X Education should target more on the countries which are responsive towards the program. They should market there product more effectively and efficiently in these countries.
6. The advertisement can be made in a way that it tempt the customers to join the courses.