Take Home Assignment

A randomized experiment was conducted and the results are in 'Training.csv'

Treatment – Indicates if the customer was part of treatment or control

Purchase – Indicates if the customer purchased the product

ID – Customer ID

V1 to V7 – features of the customer

Cost of sending a Promotion: $0.15

Revenue from purchase of product: $10 (There is only one product)

Questions:

1) Analyze the results of the experiment and identify the effect of the Treatment on product purchase and Net Incremental Revenue
2) Build a model to select the best customers to target that maximizes the Incremental Response Rate and Net Incremental Revenue.

Deliverables

3) Score the 'Test.csv' using the model and select the best customers and share the customer ID's as csv file
4) Explain briefly the approach used in a separate document and also share the code that can be executed to reproduce results.

Incremental Response Rate:

(# of Purchasers In Treated) / (# of Purchasers In Control)

Total # of customers in Treated Total # of customers in Control

Net Incremental Revenue:

[(# of Purchasers in Treated *$10) – (# of Treated Customers *$0.15)] - [# of Purchasers in Control * $10]