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In [86]: import mathlogic as ml
eventid = '20210823'
questionid = 'hack-f7b169d5-5f13-4ac2-81da-a12db8db22ff'

import pandas as pd
import numpy as np
train_data=pd.read_csv(r"C:\Users\rakesh.doddamani\Desktop\Accenture\new_data2.csv")
train_data.drop(['Unnamed: 0', 'id'],axis='columns', inplace=True)
df = pd.read_csv("/home/data/telecom_test_v2.csv")

In [87]: df1=df
df1=df1.fillna(99)
df1=df1.sort_values(by=['id','Mnth'])
df1['Total_Rev']=df1['ROAM_INT_REV']+df1['INTN_REV']+df1['RMNG_REVN']+df1['VOICE_REV']+df1['MONEY_TRN_REV']

df2=df1.groupby('id').agg(#RATIO_HIGH_LOW_SMS_REV=('SMS_REV',lambda y:max(y)/min(y) if (L
RATIO_HIGH_LOW_MONEY_TRN_REV=('MONEY_TRN_REV',lambda y:max(y)/m
RATIO_HIGH_LOW_CNT_ADV_DATA=('CNT_ADV_DATA',lambda y:max(y)/min
RATIO_HIGH_LOW_NUM_CHARGES_MNTH=('NUM_CHARGES_MNTH',lambda y:ma
#TOTAL_TOTAL_OTHER_REVENUE=('TOTAL_OTHER_REVENUE','sum'),\
MEAN_ROAM_INT_REV=('ROAM_INT_REV','mean'),MEAN_INTN_CALLS=('INT
RATIO_NUM_INT_MNTHS=('INTN_CALLS',lambda y: len(y[y>0])/len(y[:

In [88]: df2.MAX_LAST_INTN_CALL_MNTH.astype('Int64')
df2[['MAX_LAST_INTN_CALL_MNTH','MAX_LAST_RCHG_MNTH','MAX_LAST_ADV_DATA_MNTH']]=df2[['MAX_
df2['MAX_MNTHS']=df2['MAX_MNTHS'].replace([202008.0,202009.0,202010.0,202011.0,202012.0,2
#df2['Total_Rev']=df1['Total_Rev']

In [89]: JAN=df[df['Mnth']==202101].groupby('id')['VOICE_REV'].agg('max')
JAN=JAN.fillna(0)
DEC=df[df['Mnth']==202012].groupby('id')['VOICE_REV'].agg('max')
DEC=DEC.fillna(0)
df5=pd.merge(JAN,DEC,how='outer',on='id')
df5=df5.fillna(0)
df5['diff']=df5['VOICE_REV_x']-df5['VOICE_REV_y']
df6=pd.DataFrame()
df6['MAX_DIFF_VOICE_REV']=df5['diff'].fillna(0)
df4=pd.concat([df2,df6],axis=1).fillna(0)

In [90]: JAN_DIV=df[df['Mnth']==202101].groupby('id')['NUM_CHARGES_MNTH'].agg('max')
JAN_DIV=JAN_DIV.fillna(0)
DEC_DIV=df[df['Mnth']==202012].groupby('id')['NUM_CHARGES_MNTH'].agg('max')
DEC_DIV=DEC_DIV.fillna(0)
df7=pd.merge(JAN_DIV,DEC_DIV,how='outer',on='id')
df7=df7.fillna(0)
df7['div']=df7['NUM_CHARGES_MNTH_x']/df7['NUM_CHARGES_MNTH_y']
df7=df7.fillna(-1)
df7=df7.replace([np.inf],[-1])
df8=pd.DataFrame()
df8['MAX_RATIO_NUM_CHARGES_MNTH']=df7['div']
df8=df8.fillna(-1)
df4=pd.concat([df4,df8],axis=1).fillna(-1)

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In [91]: #df4['RATIO_NEW']=(df4['TOT_INTN_REV']/df4['TOT_INTN_CALLS']).fillna(-1)
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