1 OPTIONS NONOTES NOSTIMER NOSOURCE NOSYNTAXCHECK;

70

71 /\* Generated Code (IMPORT) \*/

72 /\* Source File: telecomsample.csv \*/

73 /\* Source Path: /home/kvandanamba0/Projrct/Final \*/

74 /\* Code generated on: 6/24/18, 5:14 PM \*/

75

76 %web\_drop\_table(temp);

NOTE: Table WORK.TEMP has been dropped.

NOTE: PROCEDURE SQL used (Total process time):

real time 0.00 seconds

user cpu time 0.00 seconds

system cpu time 0.01 seconds

memory 47.46k

OS Memory 41388.00k

Timestamp 07/01/2018 11:23:24 AM

Step Count 380 Switch Count 2

Page Faults 0

Page Reclaims 14

Page Swaps 0

Voluntary Context Switches 10

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 0

77

78

79 FILENAME REFFILE '/home/kvandanamba0/Projrct/Final/telecomsample.csv';

80

81 PROC IMPORT DATAFILE=REFFILE

82 DBMS=CSV replace

83 OUT=temp;

84 GETNAMES=YES;

85 RUN;

NOTE: Unable to open parameter catalog: SASUSER.PARMS.PARMS.SLIST in update mode. Temporary parameter values will be saved to

WORK.PARMS.PARMS.SLIST.

86 /\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

87 \* PRODUCT: SAS

88 \* VERSION: 9.4

89 \* CREATOR: External File Interface

90 \* DATE: 01JUL18

91 \* DESC: Generated SAS Datastep Code

92 \* TEMPLATE SOURCE: (None Specified.)

93 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

94 data WORK.TEMP ;

95 %let \_EFIERR\_ = 0; /\* set the ERROR detection macro variable \*/

96 infile REFFILE delimiter = ',' MISSOVER DSD firstobs=2 ;

97 informat Selected best32. ;

98 informat mou\_Mean best32. ;

99 informat totmrc\_Mean best32. ;

100 informat rev\_Range best32. ;

101 informat mou\_Range best32. ;

102 informat change\_mou best32. ;

103 informat drop\_blk\_Mean best32. ;

104 informat drop\_vce\_Range best32. ;

105 informat owylis\_vce\_Range best32. ;

106 informat mou\_opkv\_Range best32. ;

107 informat months best32. ;

108 informat totcalls best32. ;

109 informat retdays best32. ;

110 informat income $2. ;

111 informat eqpdays best32. ;

112 informat custcare\_Mean best32. ;

113 informat callwait\_Mean best32. ;

114 informat iwylis\_vce\_Mean best32. ;

115 informat callwait\_Range best32. ;

116 informat ccrndmou\_Range best32. ;

117 informat adjqty best32. ;

118 informat ovrrev\_Mean best32. ;

119 informat rev\_Mean best32. ;

120 informat ovrmou\_Mean best32. ;

121 informat comp\_vce\_Mean best32. ;

122 informat plcd\_vce\_Mean best32. ;

123 informat avg3mou best32. ;

124 informat avgmou best32. ;

125 informat avg3qty best32. ;

126 informat avgqty best32. ;

127 informat avg6mou best32. ;

128 informat avg6qty best32. ;

129 informat crclscod $2. ;

130 informat asl\_flag $1. ;

131 informat prizm\_social\_one $2. ;

132 informat area $24. ;

133 informat refurb\_new $1. ;

134 informat hnd\_webcap $4. ;

135 informat marital $1. ;

136 informat ethnic $1. ;

137 informat age1 best32. ;

138 informat age2 best32. ;

139 informat models best32. ;

140 informat hnd\_price best32. ;

141 informat actvsubs best32. ;

142 informat uniqsubs best32. ;

143 informat forgntvl best32. ;

144 informat dwlltype $2. ;

145 informat dwllsize $2. ;

146 informat mailordr $2. ;

147 informat occu1 $2. ;

148 informat opk\_dat\_Mean best32. ;

149 informat mtrcycle best32. ;

150 informat numbcars $2. ;

151 informat truck best32. ;

152 informat roam\_Mean best32. ;

153 informat recv\_sms\_Mean best32. ;

154 informat blck\_dat\_Mean best32. ;

155 informat mou\_pead\_Mean best32. ;

156 informat churn best32. ;

157 informat proptype $2. ;

158 informat mailresp $2. ;

159 informat cartype $2. ;

160 informat car\_buy $7. ;

161 informat children $2. ;

162 informat csa $9. ;

163 informat da\_Mean best32. ;

164 informat da\_Range best32. ;

165 informat datovr\_Mean best32. ;

166 informat datovr\_Range best32. ;

167 informat div\_type $3. ;

168 informat drop\_dat\_Mean best32. ;

169 informat drop\_vce\_Mean best32. ;

170 informat adjmou best32. ;

171 informat totrev best32. ;

172 informat adjrev best32. ;

173 informat avgrev best32. ;

174 informat Customer\_ID best32. ;

175 format Selected best12. ;

176 format mou\_Mean best12. ;

177 format totmrc\_Mean best12. ;

178 format rev\_Range best12. ;

179 format mou\_Range best12. ;

180 format change\_mou best12. ;

181 format drop\_blk\_Mean best12. ;

182 format drop\_vce\_Range best12. ;

183 format owylis\_vce\_Range best12. ;

184 format mou\_opkv\_Range best12. ;

185 format months best12. ;

186 format totcalls best12. ;

187 format retdays best12. ;

188 format income $2. ;

189 format eqpdays best12. ;

190 format custcare\_Mean best12. ;

191 format callwait\_Mean best12. ;

192 format iwylis\_vce\_Mean best12. ;

193 format callwait\_Range best12. ;

194 format ccrndmou\_Range best12. ;

195 format adjqty best12. ;

196 format ovrrev\_Mean best12. ;

197 format rev\_Mean best12. ;

198 format ovrmou\_Mean best12. ;

199 format comp\_vce\_Mean best12. ;

200 format plcd\_vce\_Mean best12. ;

201 format avg3mou best12. ;

202 format avgmou best12. ;

203 format avg3qty best12. ;

204 format avgqty best12. ;

205 format avg6mou best12. ;

206 format avg6qty best12. ;

207 format crclscod $2. ;

208 format asl\_flag $1. ;

209 format prizm\_social\_one $2. ;

210 format area $24. ;

211 format refurb\_new $1. ;

212 format hnd\_webcap $4. ;

213 format marital $1. ;

214 format ethnic $1. ;

215 format age1 best12. ;

216 format age2 best12. ;

217 format models best12. ;

218 format hnd\_price best12. ;

219 format actvsubs best12. ;

220 format uniqsubs best12. ;

221 format forgntvl best12. ;

222 format dwlltype $2. ;

223 format dwllsize $2. ;

224 format mailordr $2. ;

225 format occu1 $2. ;

226 format opk\_dat\_Mean best12. ;

227 format mtrcycle best12. ;

228 format numbcars $2. ;

229 format truck best12. ;

230 format roam\_Mean best12. ;

231 format recv\_sms\_Mean best12. ;

232 format blck\_dat\_Mean best12. ;

233 format mou\_pead\_Mean best12. ;

234 format churn best12. ;

235 format proptype $2. ;

236 format mailresp $2. ;

237 format cartype $2. ;

238 format car\_buy $7. ;

239 format children $2. ;

240 format csa $9. ;

241 format da\_Mean best12. ;

242 format da\_Range best12. ;

243 format datovr\_Mean best12. ;

244 format datovr\_Range best12. ;

245 format div\_type $3. ;

246 format drop\_dat\_Mean best12. ;

247 format drop\_vce\_Mean best12. ;

248 format adjmou best12. ;

249 format totrev best12. ;

250 format adjrev best12. ;

251 format avgrev best12. ;

252 format Customer\_ID best12. ;

253 input

254 Selected

255 mou\_Mean

256 totmrc\_Mean

257 rev\_Range

258 mou\_Range

259 change\_mou

260 drop\_blk\_Mean

261 drop\_vce\_Range

262 owylis\_vce\_Range

263 mou\_opkv\_Range

264 months

265 totcalls

266 retdays

267 income $

268 eqpdays

269 custcare\_Mean

270 callwait\_Mean

271 iwylis\_vce\_Mean

272 callwait\_Range

273 ccrndmou\_Range

274 adjqty

275 ovrrev\_Mean

276 rev\_Mean

277 ovrmou\_Mean

278 comp\_vce\_Mean

279 plcd\_vce\_Mean

280 avg3mou

281 avgmou

282 avg3qty

283 avgqty

284 avg6mou

285 avg6qty

286 crclscod $

287 asl\_flag $

288 prizm\_social\_one $

289 area $

290 refurb\_new $

291 hnd\_webcap $

292 marital $

293 ethnic $

294 age1

295 age2

296 models

297 hnd\_price

298 actvsubs

299 uniqsubs

300 forgntvl

301 dwlltype $

302 dwllsize $

303 mailordr $

304 occu1 $

305 opk\_dat\_Mean

306 mtrcycle

307 numbcars $

308 truck

309 roam\_Mean

310 recv\_sms\_Mean

311 blck\_dat\_Mean

312 mou\_pead\_Mean

313 churn

314 proptype $

315 mailresp $

316 cartype $

317 car\_buy $

318 children $

319 csa $

320 da\_Mean

321 da\_Range

322 datovr\_Mean

323 datovr\_Range

324 div\_type $

325 drop\_dat\_Mean

326 drop\_vce\_Mean

327 adjmou

328 totrev

329 adjrev

330 avgrev

331 Customer\_ID

332 ;

333 if \_ERROR\_ then call symputx('\_EFIERR\_',1); /\* set ERROR detection macro variable \*/

334 run;

NOTE: The infile REFFILE is:

Filename=/home/kvandanamba0/Projrct/Final/telecomsample.csv,

Owner Name=kvandanamba0,Group Name=oda,

Access Permission=-rw-r--r--,

Last Modified=24Jun2018:17:13:49,

File Size (bytes)=10359805

NOTE: 44807 records were read from the infile REFFILE.

The minimum record length was 78.

The maximum record length was 437.

NOTE: The data set WORK.TEMP has 44807 observations and 78 variables.

NOTE: DATA statement used (Total process time):

real time 0.20 seconds

user cpu time 0.19 seconds

system cpu time 0.02 seconds

memory 13915.03k

OS Memory 50472.00k

Timestamp 07/01/2018 11:23:24 AM

Step Count 381 Switch Count 2

Page Faults 0

Page Reclaims 312

Page Swaps 0

Voluntary Context Switches 12

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 47160

44807 rows created in WORK.TEMP from REFFILE.

NOTE: WORK.TEMP data set was successfully created.

NOTE: The data set WORK.TEMP has 44807 observations and 78 variables.

NOTE: PROCEDURE IMPORT used (Total process time):

real time 0.34 seconds

user cpu time 0.32 seconds

system cpu time 0.02 seconds

memory 13915.03k

OS Memory 50988.00k

Timestamp 07/01/2018 11:23:24 AM

Step Count 381 Switch Count 7

Page Faults 0

Page Reclaims 5791

Page Swaps 0

Voluntary Context Switches 53

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 47240

335

336 /\*PROC CONTENTS DATA=temp; RUN;\*/

337

338

339 %web\_open\_table(temp);

340

341

342

343 proc contents data = temp varnum;

344 run;

NOTE: PROCEDURE CONTENTS used (Total process time):

real time 0.12 seconds

user cpu time 0.12 seconds

system cpu time 0.01 seconds

memory 4460.87k

OS Memory 43188.00k

Timestamp 07/01/2018 11:23:24 AM

Step Count 382 Switch Count 0

Page Faults 0

Page Reclaims 291

Page Swaps 0

Voluntary Context Switches 0

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 64

345

346

347

348 /\*Checking Missing values of all Numeric variables\*/

349 proc means n nmiss mean data = temp;

350 run;

NOTE: There were 44807 observations read from the data set WORK.TEMP.

NOTE: PROCEDURE MEANS used (Total process time):

real time 0.13 seconds

user cpu time 0.15 seconds

system cpu time 0.01 seconds

memory 8092.53k

OS Memory 48048.00k

Timestamp 07/01/2018 11:23:24 AM

Step Count 383 Switch Count 4

Page Faults 0

Page Reclaims 1535

Page Swaps 0

Voluntary Context Switches 128

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 24

351

352 /\*Checking Missing values of all String variables\*/

353 proc freq data = temp;

354 tables

354 ! incomecrclscodasl\_flagprizm\_social\_onearearefurb\_newhnd\_webcapmaritalethnicdwlltypedwllsizemailordroccu1numb

354 ! carsretdays proptypemailrespcartypecar\_buychildrencsadiv\_type;

355 run;

NOTE: There were 44807 observations read from the data set WORK.TEMP.

NOTE: PROCEDURE FREQ used (Total process time):

real time 1.06 seconds

user cpu time 1.05 seconds

system cpu time 0.00 seconds

memory 2951.12k

OS Memory 43188.00k

Timestamp 07/01/2018 11:23:25 AM

Step Count 384 Switch Count 5

Page Faults 0

Page Reclaims 331

Page Swaps 0

Voluntary Context Switches 21

Involuntary Context Switches 2

Block Input Operations 0

Block Output Operations 880

356

357

358

359 /\*We have chosen 'churn' as our target variable; checking 0's and 1's freq\*/

360 proc freq data = temp;

361 tables churn;

362 run;

NOTE: There were 44807 observations read from the data set WORK.TEMP.

NOTE: PROCEDURE FREQ used (Total process time):

real time 0.02 seconds

user cpu time 0.02 seconds

system cpu time 0.01 seconds

memory 2192.78k

OS Memory 43188.00k

Timestamp 07/01/2018 11:23:25 AM

Step Count 385 Switch Count 5

Page Faults 0

Page Reclaims 311

Page Swaps 0

Voluntary Context Switches 23

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 272

363

364

365

366 /\*Treating missing values: Deleting values = 'NA' from variables

367 whose missing value % is <2%\*/

368 data temp1;

369 set temp;

370 if mou\_mean = . or totmrc\_Mean = . or rev\_Range = . or mou\_Range = . or

371 change\_mou = . or ovrrev\_Mean = . or rev\_Mean=. orovrmou\_Mean=. orage1=. orage2=. or

372 hnd\_price=. or forgntvl=. or mtrcycle=. or truck=. or roam\_Mean=. or

373 da\_Mean=. or da\_Range=. or datovr\_Mean=. or datovr\_Range=. then delete ;

374 run;

NOTE: There were 44807 observations read from the data set WORK.TEMP.

NOTE: The data set WORK.TEMP1 has 25674 observations and 78 variables.

NOTE: DATA statement used (Total process time):

real time 0.02 seconds

user cpu time 0.01 seconds

system cpu time 0.01 seconds

memory 3642.00k

OS Memory 44980.00k

Timestamp 07/01/2018 11:23:25 AM

Step Count 386 Switch Count 5

Page Faults 0

Page Reclaims 530

Page Swaps 0

Voluntary Context Switches 18

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 27144

375

376 /\*Imputing mean to income,retdays,avg6mou,avg6qty\*/

377 data temp2;

378 set temp1;

379 income1 = input(income,10.);

380 retdays1 = input(retdays,5.);

381 run;

NOTE: Numeric values have been converted to character values at the places given by: (Line):(Column).

380:18

NOTE: Invalid argument to function INPUT at line 379 column 11.

Selected=1 mou\_Mean=125.25 totmrc\_Mean=39.99 rev\_Range=0.54 mou\_Range=105 change\_mou=-63.25 drop\_blk\_Mean=3.333333333

drop\_vce\_Range=5 owylis\_vce\_Range=14 mou\_opkv\_Range=51.81 months=14 totcalls=865 retdays=36.43 income=NA eqpdays=427 custcare\_Mean=0

callwait\_Mean=0.333333333 iwylis\_vce\_Mean=0 callwait\_Range=1 ccrndmou\_Range=0 adjqty=855 ovrrev\_Mean=0 rev\_Mean=30.26 ovrmou\_Mean=0

comp\_vce\_Mean=51 plcd\_vce\_Mean=64 avg3mou=146 avgmou=151.92 avg3qty=74 avgqty=65.77 avg6mou=139 avg6qty=67 crclscod=ZA asl\_flag=N

prizm\_social\_one=T area=MIDWEST AREA refurb\_new=N hnd\_webcap=WCMB marital=U ethnic=N age1=0 age2=0 models=1 hnd\_price=149.9899902

actvsubs=1 uniqsubs=1 forgntvl=0 dwlltype=NA dwllsize=NA mailordr=NA occu1=NA opk\_dat\_Mean=0 mtrcycle=0 numbcars=NA truck=0

roam\_Mean=0 recv\_sms\_Mean=0 blck\_dat\_Mean=0 mou\_pead\_Mean=0 churn=1 proptype=NA mailresp=NA cartype=NA car\_buy=UNKNOWN children=NA

csa=KCYTOP913 da\_Mean=0 da\_Range=0 datovr\_Mean=0 datovr\_Range=0 div\_type=BTH drop\_dat\_Mean=0 drop\_vce\_Mean=2 adjmou=1975

totrev=464.29 adjrev=404.31 avgrev=31.1 Customer\_ID=1046164 income1=. retdays1=. \_ERROR\_=1 \_N\_=3

NOTE: Invalid argument to function INPUT at line 379 column 11.

Selected=1 mou\_Mean=34.25 totmrc\_Mean=35.99 rev\_Range=35.99 mou\_Range=109 change\_mou=74.75 drop\_blk\_Mean=0 drop\_vce\_Range=0

owylis\_vce\_Range=0 mou\_opkv\_Range=0 months=24 totcalls=1588 retdays=36.43 income=NA eqpdays=98 custcare\_Mean=0 callwait\_Mean=0

iwylis\_vce\_Mean=0 callwait\_Range=0 ccrndmou\_Range=0 adjqty=1570 ovrrev\_Mean=0 rev\_Mean=26.9925 ovrmou\_Mean=0 comp\_vce\_Mean=0

plcd\_vce\_Mean=0 avg3mou=9 avgmou=171.95 avg3qty=8 avgqty=71.36 avg6mou=90 avg6qty=43 crclscod=AA asl\_flag=N prizm\_social\_one=S

area=LOS ANGELES AREA refurb\_new=R hnd\_webcap=WCMB marital=U ethnic=O age1=0 age2=0 models=2 hnd\_price=179.9899902 actvsubs=2

uniqsubs=2 forgntvl=0 dwlltype=NA dwllsize=NA mailordr=NA occu1=NA opk\_dat\_Mean=0 mtrcycle=0 numbcars=NA truck=0 roam\_Mean=0

recv\_sms\_Mean=0 blck\_dat\_Mean=0 mou\_pead\_Mean=0 churn=1 proptype=NA mailresp=NA cartype=NA car\_buy=UNKNOWN children=NA csa=LAXSAN714

da\_Mean=0 da\_Range=0 datovr\_Mean=0 datovr\_Range=0 div\_type=NA drop\_dat\_Mean=0 drop\_vce\_Mean=0 adjmou=3783 totrev=751.16

adjrev=715.94 avgrev=32.54 Customer\_ID=1035657 income1=. retdays1=. \_ERROR\_=1 \_N\_=5

NOTE: Invalid argument to function INPUT at line 379 column 11.

Selected=1 mou\_Mean=649.75 totmrc\_Mean=49.99 rev\_Range=5.13 mou\_Range=231 change\_mou=147.25 drop\_blk\_Mean=12 drop\_vce\_Range=5

owylis\_vce\_Range=13 mou\_opkv\_Range=107.82 months=26 totcalls=4829 retdays=36.43 income=NA eqpdays=513 custcare\_Mean=12.33333333

callwait\_Mean=1.333333333 iwylis\_vce\_Mean=0 callwait\_Range=1 ccrndmou\_Range=64 adjqty=4796 ovrrev\_Mean=1.2675 rev\_Mean=53.8975

ovrmou\_Mean=3.25 comp\_vce\_Mean=156 plcd\_vce\_Mean=208 avg3mou=601 avgmou=481.63 avg3qty=225 avgqty=199.83 avg6mou=635 avg6qty=239

crclscod=DA asl\_flag=N prizm\_social\_one=C area=PHILADELPHIA AREA refurb\_new=N hnd\_webcap=WCMB marital=U ethnic=S age1=0 age2=0

models=2 hnd\_price=129.9899902 actvsubs=1 uniqsubs=1 forgntvl=0 dwlltype=NA dwllsize=NA mailordr=NA occu1=NA opk\_dat\_Mean=0

mtrcycle=0 numbcars=NA truck=0 roam\_Mean=0 recv\_sms\_Mean=0 blck\_dat\_Mean=0 mou\_pead\_Mean=0.133333333 churn=1 proptype=NA mailresp=NA

cartype=NA car\_buy=UNKNOWN children=NA csa=PHIWIL302 da\_Mean=0.99 da\_Range=1.98 datovr\_Mean=1.2675 datovr\_Range=4.68 div\_type=NA

drop\_dat\_Mean=0 drop\_vce\_Mean=7 adjmou=11559 totrev=1131.02 adjrev=1094.21 avgrev=45.59 Customer\_ID=1016931 income1=. retdays1=.

\_ERROR\_=1 \_N\_=9

NOTE: Invalid argument to function INPUT at line 379 column 11.

Selected=1 mou\_Mean=258 totmrc\_Mean=44.99 rev\_Range=22.8 mou\_Range=193 change\_mou=102 drop\_blk\_Mean=3.666666667 drop\_vce\_Range=4

owylis\_vce\_Range=16 mou\_opkv\_Range=47.12 months=8 totcalls=463 retdays=36.43 income=NA eqpdays=215 custcare\_Mean=0 callwait\_Mean=0

iwylis\_vce\_Mean=1.333333333 callwait\_Range=0 ccrndmou\_Range=0 adjqty=463 ovrrev\_Mean=8.6 rev\_Mean=43.6875 ovrmou\_Mean=21.5

comp\_vce\_Mean=76 plcd\_vce\_Mean=90.33333333 avg3mou=224 avgmou=215.5 avg3qty=74 avgqty=77.17 avg6mou=216 avg6qty=77 crclscod=EA

asl\_flag=Y prizm\_social\_one=T area=CENTRAL/SOUTH TEXAS AREA refurb\_new=N hnd\_webcap=WCMB marital=U ethnic=N age1=0 age2=0 models=1

hnd\_price=199.9899902 actvsubs=1 uniqsubs=1 forgntvl=0 dwlltype=NA dwllsize=NA mailordr=NA occu1=NA opk\_dat\_Mean=0 mtrcycle=0

numbcars=NA truck=0 roam\_Mean=0.0975 recv\_sms\_Mean=0 blck\_dat\_Mean=0 mou\_pead\_Mean=0 churn=1 proptype=NA mailresp=NA cartype=NA

car\_buy=UNKNOWN children=NA csa=SANKIL254 da\_Mean=0 da\_Range=0 datovr\_Mean=0 datovr\_Range=0 div\_type=LTD drop\_dat\_Mean=0

drop\_vce\_Mean=2 adjmou=1293 totrev=293.17 adjrev=222.56 avgrev=37.09 Customer\_ID=1093978 income1=. retdays1=. \_ERROR\_=1 \_N\_=11

NOTE: Invalid argument to function INPUT at line 379 column 11.

Selected=1 mou\_Mean=509.25 totmrc\_Mean=69.99 rev\_Range=5.73 mou\_Range=237 change\_mou=26.75 drop\_blk\_Mean=5.333333333

drop\_vce\_Range=7 owylis\_vce\_Range=13 mou\_opkv\_Range=146.52 months=14 totcalls=1621 retdays=36.43 income=NA eqpdays=436

custcare\_Mean=0.333333333 callwait\_Mean=0 iwylis\_vce\_Mean=2 callwait\_Range=0 ccrndmou\_Range=3 adjqty=1621 ovrrev\_Mean=0

rev\_Mean=72.825 ovrmou\_Mean=0 comp\_vce\_Mean=59 plcd\_vce\_Mean=71 avg3mou=500 avgmou=519.69 avg3qty=128 avgqty=124.69 avg6mou=572

avg6qty=142 crclscod=AA asl\_flag=N prizm\_social\_one=S area=SOUTHWEST AREA refurb\_new=N hnd\_webcap=WCMB marital=U ethnic=S age1=0

age2=0 models=1 hnd\_price=149.9899902 actvsubs=1 uniqsubs=1 forgntvl=0 dwlltype=NA dwllsize=NA mailordr=NA occu1=NA opk\_dat\_Mean=0

mtrcycle=0 numbcars=NA truck=0 roam\_Mean=0.0975 recv\_sms\_Mean=0 blck\_dat\_Mean=0 mou\_pead\_Mean=3.636666667 churn=1 proptype=NA

mailresp=NA cartype=NA car\_buy=UNKNOWN children=NA csa=NEVPOW619 da\_Mean=0.7425 da\_Range=0.99 datovr\_Mean=0 datovr\_Range=0

div\_type=LDD drop\_dat\_Mean=0 drop\_vce\_Mean=4.666666667 adjmou=6756 totrev=1054.56 adjrev=974.58 avgrev=74.97 Customer\_ID=1045250

income1=. retdays1=. \_ERROR\_=1 \_N\_=28

NOTE: Invalid argument to function INPUT at line 379 column 11.

Selected=1 mou\_Mean=74.25 totmrc\_Mean=39.99 rev\_Range=0.99 mou\_Range=49 change\_mou=-16.25 drop\_blk\_Mean=0 drop\_vce\_Range=0

owylis\_vce\_Range=0 mou\_opkv\_Range=0 months=12 totcalls=862 retdays=36.43 income=NA eqpdays=364 custcare\_Mean=0 callwait\_Mean=0

iwylis\_vce\_Mean=0 callwait\_Range=0 ccrndmou\_Range=0 adjqty=862 ovrrev\_Mean=0 rev\_Mean=30.485 ovrmou\_Mean=0 comp\_vce\_Mean=0

plcd\_vce\_Mean=0 avg3mou=80 avgmou=224.55 avg3qty=39 avgqty=78.36 avg6mou=92 avg6qty=36 crclscod=AA asl\_flag=N prizm\_social\_one=NA

area=GREAT LAKES AREA refurb\_new=N hnd\_webcap=WCMB marital=U ethnic=D age1=0 age2=0 models=1 hnd\_price=129.9899902 actvsubs=1

uniqsubs=1 forgntvl=0 dwlltype=NA dwllsize=NA mailordr=NA occu1=NA opk\_dat\_Mean=0 mtrcycle=0 numbcars=NA truck=0 roam\_Mean=0

recv\_sms\_Mean=0 blck\_dat\_Mean=0 mou\_pead\_Mean=0 churn=1 proptype=NA mailresp=NA cartype=NA car\_buy=UNKNOWN children=NA csa=PITGRE412

da\_Mean=0.495 da\_Range=0.99 datovr\_Mean=0 datovr\_Range=0 div\_type=NA drop\_dat\_Mean=0 drop\_vce\_Mean=0 adjmou=2470 totrev=424.19

adjrev=364.21 avgrev=33.11 Customer\_ID=1070202 income1=. retdays1=. \_ERROR\_=1 \_N\_=30

NOTE: Invalid argument to function INPUT at line 379 column 11.

Selected=1 mou\_Mean=360.75 totmrc\_Mean=29.99 rev\_Range=78.81 mou\_Range=224 change\_mou=-98.75 drop\_blk\_Mean=6.333333333

drop\_vce\_Range=7 owylis\_vce\_Range=7 mou\_opkv\_Range=47.99 months=28 totcalls=2602 retdays=50 income=NA eqpdays=863 custcare\_Mean=0

callwait\_Mean=0.666666667 iwylis\_vce\_Mean=0 callwait\_Range=2 ccrndmou\_Range=0 adjqty=2602 ovrrev\_Mean=62.3875 rev\_Mean=92.8725

ovrmou\_Mean=178.25 comp\_vce\_Mean=97 plcd\_vce\_Mean=117.3333333 avg3mou=394 avgmou=221.04 avg3qty=161 avgqty=96.37 avg6mou=315

avg6qty=136 crclscod=A2 asl\_flag=N prizm\_social\_one=C area=SOUTH FLORIDA AREA refurb\_new=N hnd\_webcap=WC marital=U ethnic=N age1=0

age2=0 models=1 hnd\_price=29.98999023 actvsubs=1 uniqsubs=1 forgntvl=0 dwlltype=S dwllsize=NA mailordr=NA occu1=NA opk\_dat\_Mean=0

mtrcycle=0 numbcars=NA truck=0 roam\_Mean=0 recv\_sms\_Mean=0 blck\_dat\_Mean=0 mou\_pead\_Mean=0 churn=1 proptype=B mailresp=NA cartype=NA

car\_buy=UNKNOWN children=NA csa=MIADFD954 da\_Mean=0.495 da\_Range=0.99 datovr\_Mean=0 datovr\_Range=0 div\_type=NA drop\_dat\_Mean=0

drop\_vce\_Mean=3.333333333 adjmou=5968 totrev=1072.09 adjrev=1068.89 avgrev=39.59 Customer\_ID=1012587 income1=. retdays1=. \_ERROR\_=1

\_N\_=34

NOTE: Invalid argument to function INPUT at line 379 column 11.

Selected=1 mou\_Mean=658.25 totmrc\_Mean=10 rev\_Range=2.97 mou\_Range=349 change\_mou=9.75 drop\_blk\_Mean=12.66666667 drop\_vce\_Range=4

owylis\_vce\_Range=2 mou\_opkv\_Range=23.72 months=18 totcalls=2694 retdays=36.43 income=NA eqpdays=333 custcare\_Mean=0 callwait\_Mean=1

iwylis\_vce\_Mean=17.33333333 callwait\_Range=0 ccrndmou\_Range=0 adjqty=2693 ovrrev\_Mean=0 rev\_Mean=11.2375 ovrmou\_Mean=0

comp\_vce\_Mean=83 plcd\_vce\_Mean=142.6666667 avg3mou=655 avgmou=465 avg3qty=187 avgqty=158.41 avg6mou=714 avg6qty=225 crclscod=BA

asl\_flag=N prizm\_social\_one=T area=SOUTHWEST AREA refurb\_new=N hnd\_webcap=WCMB marital=U ethnic=N age1=0 age2=0 models=2

hnd\_price=79.98999023 actvsubs=5 uniqsubs=7 forgntvl=0 dwlltype=NA dwllsize=NA mailordr=NA occu1=NA opk\_dat\_Mean=0 mtrcycle=0

numbcars=NA truck=0 roam\_Mean=0 recv\_sms\_Mean=0 blck\_dat\_Mean=0 mou\_pead\_Mean=0 churn=1 proptype=NA mailresp=NA cartype=NA

car\_buy=UNKNOWN children=NA csa=NEVPOW619 da\_Mean=1.2375 da\_Range=2.97 datovr\_Mean=0 datovr\_Range=0 div\_type=NA drop\_dat\_Mean=0

drop\_vce\_Mean=11.33333333 adjmou=7905 totrev=942.78 adjrev=892.79 avgrev=52.52 Customer\_ID=1052286 income1=. retdays1=. \_ERROR\_=1

\_N\_=40

NOTE: Invalid argument to function INPUT at line 379 column 11.

Selected=1 mou\_Mean=438.5 totmrc\_Mean=14.8325 rev\_Range=289.26 mou\_Range=1635 change\_mou=1196.5 drop\_blk\_Mean=19.33333333

drop\_vce\_Range=4 owylis\_vce\_Range=51 mou\_opkv\_Range=305.39 months=7 totcalls=337 retdays=36.43 income=NA eqpdays=13 custcare\_Mean=1

callwait\_Mean=1.333333333 iwylis\_vce\_Mean=2.666666667 callwait\_Range=4 ccrndmou\_Range=34 adjqty=337 ovrrev\_Mean=24 rev\_Mean=89.405

ovrmou\_Mean=60 comp\_vce\_Mean=68.66666667 plcd\_vce\_Mean=124.6666667 avg3mou=40 avgmou=309.75 avg3qty=9 avgqty=84.25 avg6mou=.

avg6qty=. crclscod=DA asl\_flag=Y prizm\_social\_one=NA area=DC/MARYLAND/VIRGINIA ARE refurb\_new=N hnd\_webcap=WCMB marital=U ethnic=P

age1=0 age2=0 models=1 hnd\_price=99.98999023 actvsubs=1 uniqsubs=1 forgntvl=0 dwlltype=NA dwllsize=NA mailordr=NA occu1=NA

opk\_dat\_Mean=0 mtrcycle=0 numbcars=NA truck=0 roam\_Mean=0 recv\_sms\_Mean=0 blck\_dat\_Mean=0 mou\_pead\_Mean=0 churn=1 proptype=NA

mailresp=NA cartype=NA car\_buy=UNKNOWN children=NA csa=NCRCHE757 da\_Mean=1.485 da\_Range=4.95 datovr\_Mean=0 datovr\_Range=0

div\_type=NA drop\_dat\_Mean=0 drop\_vce\_Mean=1.333333333 adjmou=1239 totrev=566.04 adjrev=472.16 avgrev=118.04 Customer\_ID=1095568

income1=. retdays1=. \_ERROR\_=1 \_N\_=41

NOTE: Invalid argument to function INPUT at line 379 column 11.

Selected=1 mou\_Mean=707 totmrc\_Mean=44.99 rev\_Range=56.35 mou\_Range=201 change\_mou=126 drop\_blk\_Mean=8.666666667 drop\_vce\_Range=0

owylis\_vce\_Range=17 mou\_opkv\_Range=22.46 months=13 totcalls=2677 retdays=36.43 income=NA eqpdays=376 custcare\_Mean=11.33333333

callwait\_Mean=0 iwylis\_vce\_Mean=13.33333333 callwait\_Range=0 ccrndmou\_Range=0 adjqty=2664 ovrrev\_Mean=20.9125 rev\_Mean=55.9025

ovrmou\_Mean=59.75 comp\_vce\_Mean=130.6666667 plcd\_vce\_Mean=194.3333333 avg3mou=665 avgmou=885.5 avg3qty=189 avgqty=222 avg6mou=896

avg6qty=211 crclscod=ZA asl\_flag=Y prizm\_social\_one=U area=NEW YORK CITY AREA refurb\_new=N hnd\_webcap=WCMB marital=U ethnic=R age1=0

age2=0 models=1 hnd\_price=129.9899902 actvsubs=1 uniqsubs=1 forgntvl=0 dwlltype=NA dwllsize=NA mailordr=NA occu1=NA opk\_dat\_Mean=0

mtrcycle=0 numbcars=NA truck=0 roam\_Mean=0 recv\_sms\_Mean=0 blck\_dat\_Mean=0 mou\_pead\_Mean=0 churn=1 proptype=NA mailresp=NA

cartype=NA car\_buy=UNKNOWN children=NA csa=NYCBRO917 da\_Mean=0 da\_Range=0 datovr\_Mean=0 datovr\_Range=0 div\_type=NA drop\_dat\_Mean=0

drop\_vce\_Mean=8 adjmou=10626 totrev=666.42 adjrev=600.41 avgrev=50.03 Customer\_ID=1080651 income1=. retdays1=. \_ERROR\_=1 \_N\_=44

NOTE: Invalid argument to function INPUT at line 379 column 11.

Selected=1 mou\_Mean=227.5 totmrc\_Mean=82.49 rev\_Range=2.75 mou\_Range=157 change\_mou=16.5 drop\_blk\_Mean=2 drop\_vce\_Range=1

owylis\_vce\_Range=6 mou\_opkv\_Range=29.4 months=43 totcalls=3131 retdays=36.43 income=NA eqpdays=1282 custcare\_Mean=0 callwait\_Mean=0

iwylis\_vce\_Mean=1.666666667 callwait\_Range=0 ccrndmou\_Range=0 adjqty=3062 ovrrev\_Mean=0 rev\_Mean=84.6275 ovrmou\_Mean=0

comp\_vce\_Mean=58 plcd\_vce\_Mean=74.33333333 avg3mou=222 avgmou=197.39 avg3qty=88 avgqty=74.68 avg6mou=182 avg6qty=71 crclscod=A

asl\_flag=N prizm\_social\_one=NA area=SOUTHWEST AREA refurb\_new=R hnd\_webcap=NA marital=U ethnic=N age1=0 age2=0 models=1

hnd\_price=9.989997864 actvsubs=2 uniqsubs=3 forgntvl=0 dwlltype=NA dwllsize=NA mailordr=NA occu1=NA opk\_dat\_Mean=0 mtrcycle=0

numbcars=NA truck=0 roam\_Mean=0 recv\_sms\_Mean=0 blck\_dat\_Mean=0 mou\_pead\_Mean=0 churn=1 proptype=NA mailresp=NA cartype=NA

car\_buy=UNKNOWN children=NA csa=PHXPHX602 da\_Mean=1.2375 da\_Range=0.99 datovr\_Mean=0 datovr\_Range=0 div\_type=NA drop\_dat\_Mean=0

drop\_vce\_Mean=1.666666667 adjmou=8093 totrev=3626.88 adjrev=3472.15 avgrev=84.69 Customer\_ID=1002897 income1=. retdays1=. \_ERROR\_=1

\_N\_=46

NOTE: Invalid argument to function INPUT at line 379 column 11.

Selected=1 mou\_Mean=0 totmrc\_Mean=50 rev\_Range=0 mou\_Range=0 change\_mou=0 drop\_blk\_Mean=0 drop\_vce\_Range=0 owylis\_vce\_Range=0

mou\_opkv\_Range=0 months=23 totcalls=7883 retdays=36.43 income=NA eqpdays=359 custcare\_Mean=0 callwait\_Mean=0 iwylis\_vce\_Mean=0

callwait\_Range=0 ccrndmou\_Range=0 adjqty=7859 ovrrev\_Mean=0 rev\_Mean=50 ovrmou\_Mean=0 comp\_vce\_Mean=0 plcd\_vce\_Mean=0 avg3mou=0

avgmou=624.18 avg3qty=0 avgqty=357.23 avg6mou=351 avg6qty=243 crclscod=BA asl\_flag=N prizm\_social\_one=S area=DALLAS AREA

refurb\_new=N hnd\_webcap=WCMB marital=U ethnic=F age1=0 age2=0 models=2 hnd\_price=129.9899902 actvsubs=1 uniqsubs=1 forgntvl=0

dwlltype=NA dwllsize=NA mailordr=NA occu1=NA opk\_dat\_Mean=0 mtrcycle=0 numbcars=NA truck=0 roam\_Mean=0 recv\_sms\_Mean=0

blck\_dat\_Mean=0 mou\_pead\_Mean=0 churn=1 proptype=NA mailresp=NA cartype=NA car\_buy=UNKNOWN children=NA csa=DALDAL214 da\_Mean=0

da\_Range=0 datovr\_Mean=0 datovr\_Range=0 div\_type=NA drop\_dat\_Mean=0 drop\_vce\_Mean=0 adjmou=13732 totrev=2061.35 adjrev=2008.02

avgrev=91.27 Customer\_ID=1023434 income1=. retdays1=. \_ERROR\_=1 \_N\_=49

NOTE: Invalid argument to function INPUT at line 379 column 11.

Selected=1 mou\_Mean=0 totmrc\_Mean=0 rev\_Range=0 mou\_Range=0 change\_mou=0 drop\_blk\_Mean=0 drop\_vce\_Range=0 owylis\_vce\_Range=0

mou\_opkv\_Range=0 months=42 totcalls=6355 retdays=36.43 income=NA eqpdays=914 custcare\_Mean=0 callwait\_Mean=0 iwylis\_vce\_Mean=0

callwait\_Range=0 ccrndmou\_Range=0 adjqty=6355 ovrrev\_Mean=0 rev\_Mean=5 ovrmou\_Mean=0 comp\_vce\_Mean=0 plcd\_vce\_Mean=0 avg3mou=463

avgmou=621.35 avg3qty=241 avgqty=317.75 avg6mou=576 avg6qty=275 crclscod=A asl\_flag=N prizm\_social\_one=U

area=CENTRAL/SOUTH TEXAS AREA refurb\_new=R hnd\_webcap=NA marital=U ethnic=U age1=0 age2=0 models=2 hnd\_price=9.989997864 actvsubs=3

uniqsubs=3 forgntvl=0 dwlltype=NA dwllsize=NA mailordr=NA occu1=NA opk\_dat\_Mean=0 mtrcycle=0 numbcars=NA truck=0 roam\_Mean=0

recv\_sms\_Mean=0 blck\_dat\_Mean=0 mou\_pead\_Mean=0 churn=1 proptype=NA mailresp=NA cartype=NA car\_buy=UNKNOWN children=NA csa=SANAUS512

da\_Mean=0 da\_Range=0 datovr\_Mean=0 datovr\_Range=0 div\_type=NA drop\_dat\_Mean=0 drop\_vce\_Mean=0 adjmou=12427 totrev=958.23

adjrev=914.36 avgrev=45.72 Customer\_ID=1001626 income1=. retdays1=. \_ERROR\_=1 \_N\_=52

NOTE: Invalid argument to function INPUT at line 379 column 11.

Selected=1 mou\_Mean=1034.5 totmrc\_Mean=85 rev\_Range=22.57 mou\_Range=870 change\_mou=361.5 drop\_blk\_Mean=9 drop\_vce\_Range=4

owylis\_vce\_Range=115 mou\_opkv\_Range=142.05 months=11 totcalls=3832 retdays=36.43 income=NA eqpdays=348 custcare\_Mean=0

callwait\_Mean=0 iwylis\_vce\_Mean=43 callwait\_Range=0 ccrndmou\_Range=0 adjqty=3815 ovrrev\_Mean=0 rev\_Mean=98.79 ovrmou\_Mean=0

comp\_vce\_Mean=372 plcd\_vce\_Mean=412.6666667 avg3mou=914 avgmou=796.6 avg3qty=448 avgqty=381.5 avg6mou=798 avg6qty=381 crclscod=BA

asl\_flag=N prizm\_social\_one=U area=NEW ENGLAND AREA refurb\_new=N hnd\_webcap=WCMB marital=U ethnic=N age1=0 age2=0 models=1

hnd\_price=199.9899902 actvsubs=1 uniqsubs=1 forgntvl=0 dwlltype=NA dwllsize=NA mailordr=NA occu1=NA opk\_dat\_Mean=0 mtrcycle=0

numbcars=NA truck=0 roam\_Mean=6.6725 recv\_sms\_Mean=0 blck\_dat\_Mean=0 mou\_pead\_Mean=0 churn=1 proptype=NA mailresp=NA cartype=NA

car\_buy=UNKNOWN children=NA csa=NNYSYR315 da\_Mean=4.2075 da\_Range=5.94 datovr\_Mean=0 datovr\_Range=0 div\_type=NA drop\_dat\_Mean=0

drop\_vce\_Mean=8.666666667 adjmou=7966 totrev=1051.86 adjrev=966.86 avgrev=96.69 Customer\_ID=1055208 income1=. retdays1=. \_ERROR\_=1

\_N\_=63

NOTE: Invalid argument to function INPUT at line 379 column 11.

Selected=1 mou\_Mean=214.25 totmrc\_Mean=29.99 rev\_Range=17.18 mou\_Range=210 change\_mou=-106.25 drop\_blk\_Mean=6.333333333

drop\_vce\_Range=6 owylis\_vce\_Range=14 mou\_opkv\_Range=43.08 months=11 totcalls=2244 retdays=36.43 income=NA eqpdays=338

custcare\_Mean=0.666666667 callwait\_Mean=0 iwylis\_vce\_Mean=0 callwait\_Range=0 ccrndmou\_Range=8 adjqty=2240 ovrrev\_Mean=0

rev\_Mean=36.185 ovrmou\_Mean=0 comp\_vce\_Mean=88.66666667 plcd\_vce\_Mean=127.6666667 avg3mou=250 avgmou=347.2 avg3qty=149 avgqty=224

avg6mou=261 avg6qty=167 crclscod=ZA asl\_flag=N prizm\_social\_one=C area=NORTHWEST/ROCKY MOUNTAIN refurb\_new=N hnd\_webcap=WC marital=U

ethnic=U age1=0 age2=0 models=1 hnd\_price=29.98999023 actvsubs=1 uniqsubs=1 forgntvl=0 dwlltype=NA dwllsize=NA mailordr=NA occu1=NA

opk\_dat\_Mean=0 mtrcycle=0 numbcars=NA truck=0 roam\_Mean=0.825 recv\_sms\_Mean=0 blck\_dat\_Mean=0 mou\_pead\_Mean=0 churn=1 proptype=NA

mailresp=NA cartype=NA car\_buy=UNKNOWN children=NA csa=DENDEN303 da\_Mean=3.465 da\_Range=8.91 datovr\_Mean=0 datovr\_Range=0

div\_type=NA drop\_dat\_Mean=0 drop\_vce\_Mean=5 adjmou=3472 totrev=555.5 adjrev=495.52 avgrev=49.55 Customer\_ID=1056691 income1=.

retdays1=. \_ERROR\_=1 \_N\_=64

NOTE: Invalid argument to function INPUT at line 379 column 11.

Selected=1 mou\_Mean=624 totmrc\_Mean=59.99 rev\_Range=0 mou\_Range=77 change\_mou=-26 drop\_blk\_Mean=7.333333333 drop\_vce\_Range=6

owylis\_vce\_Range=9 mou\_opkv\_Range=219.11 months=27 totcalls=3035 retdays=36.43 income=NA eqpdays=805 custcare\_Mean=1

callwait\_Mean=0.333333333 iwylis\_vce\_Mean=6.333333333 callwait\_Range=1 ccrndmou\_Range=1 adjqty=2936 ovrrev\_Mean=0 rev\_Mean=53.42

ovrmou\_Mean=0 comp\_vce\_Mean=120.3333333 plcd\_vce\_Mean=151.3333333 avg3mou=633 avgmou=612.96 avg3qty=162 avgqty=117.44 avg6mou=523

avg6qty=143 crclscod=A asl\_flag=N prizm\_social\_one=C area=NEW ENGLAND AREA refurb\_new=N hnd\_webcap=NA marital=U ethnic=N age1=0

age2=0 models=1 hnd\_price=29.98999023 actvsubs=1 uniqsubs=1 forgntvl=0 dwlltype=NA dwllsize=NA mailordr=NA occu1=NA opk\_dat\_Mean=0

mtrcycle=0 numbcars=NA truck=0 roam\_Mean=0 recv\_sms\_Mean=0 blck\_dat\_Mean=0 mou\_pead\_Mean=0 churn=1 proptype=NA mailresp=NA

cartype=NA car\_buy=UNKNOWN children=NA csa=BOSBOS781 da\_Mean=0 da\_Range=0 datovr\_Mean=0 datovr\_Range=0 div\_type=NA drop\_dat\_Mean=0

drop\_vce\_Mean=3.666666667 adjmou=15324 totrev=2126.94 adjrev=2032.9 avgrev=81.32 Customer\_ID=1018280 income1=. retdays1=. \_ERROR\_=1

\_N\_=68

NOTE: Invalid argument to function INPUT at line 379 column 11.

Selected=1 mou\_Mean=50 totmrc\_Mean=39.99 rev\_Range=0 mou\_Range=72 change\_mou=-27 drop\_blk\_Mean=1.333333333 drop\_vce\_Range=1

owylis\_vce\_Range=9 mou\_opkv\_Range=25.97 months=21 totcalls=223 retdays=36.43 income=NA eqpdays=196 custcare\_Mean=0 callwait\_Mean=0

iwylis\_vce\_Mean=1 callwait\_Range=0 ccrndmou\_Range=0 adjqty=198 ovrrev\_Mean=0 rev\_Mean=29.99 ovrmou\_Mean=0 comp\_vce\_Mean=14.66666667

plcd\_vce\_Mean=17.66666667 avg3mou=59 avgmou=45.45 avg3qty=25 avgqty=18 avg6mou=48 avg6qty=19 crclscod=AA asl\_flag=N

prizm\_social\_one=T area=NORTH FLORIDA AREA refurb\_new=R hnd\_webcap=WCMB marital=U ethnic=N age1=0 age2=0 models=2

hnd\_price=9.989997864 actvsubs=1 uniqsubs=1 forgntvl=0 dwlltype=NA dwllsize=NA mailordr=NA occu1=NA opk\_dat\_Mean=0 mtrcycle=0

numbcars=NA truck=0 roam\_Mean=0 recv\_sms\_Mean=0 blck\_dat\_Mean=0 mou\_pead\_Mean=0 churn=1 proptype=NA mailresp=NA cartype=NA

car\_buy=UNKNOWN children=NA csa=FLNKIS407 da\_Mean=0 da\_Range=0 datovr\_Mean=0 datovr\_Range=0 div\_type=NA drop\_dat\_Mean=0

drop\_vce\_Mean=0.333333333 adjmou=500 totrev=419.09 adjrev=379.1 avgrev=34.46 Customer\_ID=1031590 income1=. retdays1=. \_ERROR\_=1

\_N\_=77

NOTE: Invalid argument to function INPUT at line 379 column 11.

Selected=1 mou\_Mean=1448.5 totmrc\_Mean=59.99 rev\_Range=176.4 mou\_Range=1703 change\_mou=20.5 drop\_blk\_Mean=14.33333333

drop\_vce\_Range=5 owylis\_vce\_Range=65 mou\_opkv\_Range=931.69 months=19 totcalls=4368 retdays=36.43 income=NA eqpdays=586

custcare\_Mean=2.333333333 callwait\_Mean=0 iwylis\_vce\_Mean=32.33333333 callwait\_Range=0 ccrndmou\_Range=18 adjqty=4352

ovrrev\_Mean=58.95 rev\_Mean=102.99 ovrmou\_Mean=196.5 comp\_vce\_Mean=330.3333333 plcd\_vce\_Mean=399.6666667 avg3mou=1442 avgmou=801.33

avg3qty=425 avgqty=241.78 avg6mou=1179 avg6qty=358 crclscod=DA asl\_flag=N prizm\_social\_one=U area=NEW ENGLAND AREA refurb\_new=N

hnd\_webcap=WCMB marital=B ethnic=U age1=26 age2=0 models=1 hnd\_price=79.98999023 actvsubs=1 uniqsubs=1 forgntvl=0 dwlltype=M

dwllsize=NA mailordr=NA occu1=NA opk\_dat\_Mean=0 mtrcycle=0 numbcars=NA truck=0 roam\_Mean=1.28 recv\_sms\_Mean=0 blck\_dat\_Mean=0

mou\_pead\_Mean=0 churn=1 proptype=NA mailresp=NA cartype=NA car\_buy=UNKNOWN children=NA csa=BOSBOS781 da\_Mean=0.495 da\_Range=0.99

datovr\_Mean=0 datovr\_Range=0 div\_type=LDD drop\_dat\_Mean=0 drop\_vce\_Mean=11 adjmou=14424 totrev=1557.33 adjrev=1505.72 avgrev=83.65

Customer\_ID=1036514 income1=. retdays1=. \_ERROR\_=1 \_N\_=88

NOTE: Invalid argument to function INPUT at line 379 column 11.

Selected=1 mou\_Mean=1257.5 totmrc\_Mean=84.99 rev\_Range=57.56 mou\_Range=686 change\_mou=309.5 drop\_blk\_Mean=12.66666667

drop\_vce\_Range=9 owylis\_vce\_Range=65 mou\_opkv\_Range=233.21 months=6 totcalls=1483 retdays=36.43 income=NA eqpdays=195

custcare\_Mean=8 callwait\_Mean=4.666666667 iwylis\_vce\_Mean=23.66666667 callwait\_Range=6 ccrndmou\_Range=107 adjqty=1454

ovrrev\_Mean=13.6675 rev\_Mean=95.6075 ovrmou\_Mean=34.25 comp\_vce\_Mean=272 plcd\_vce\_Mean=326.3333333 avg3mou=1154 avgmou=1084.2

avg3qty=338 avgqty=290.8 avg6mou=. avg6qty=. crclscod=EA asl\_flag=Y prizm\_social\_one=S area=DALLAS AREA refurb\_new=N hnd\_webcap=WCMB

marital=U ethnic=S age1=0 age2=0 models=1 hnd\_price=149.9899902 actvsubs=1 uniqsubs=2 forgntvl=0 dwlltype=NA dwllsize=NA mailordr=NA

occu1=NA opk\_dat\_Mean=0 mtrcycle=0 numbcars=NA truck=0 roam\_Mean=0.4075 recv\_sms\_Mean=0 blck\_dat\_Mean=0 mou\_pead\_Mean=3.49 churn=1

proptype=NA mailresp=NA cartype=NA car\_buy=UNKNOWN children=NA csa=DALDAL214 da\_Mean=2.2275 da\_Range=6.93 datovr\_Mean=1.2675

datovr\_Range=5.07 div\_type=NA drop\_dat\_Mean=0 drop\_vce\_Mean=5.666666667 adjmou=5421 totrev=796.35 adjrev=695.93 avgrev=139.19

Customer\_ID=1092126 income1=. retdays1=. \_ERROR\_=1 \_N\_=91

NOTE: Invalid argument to function INPUT at line 379 column 11.

WARNING: Limit set by ERRORS= option reached. Further errors of this type will not be printed.

Selected=1 mou\_Mean=1138.5 totmrc\_Mean=59.99 rev\_Range=35.29 mou\_Range=741 change\_mou=-378.5 drop\_blk\_Mean=17.33333333

drop\_vce\_Range=10 owylis\_vce\_Range=44 mou\_opkv\_Range=159.51 months=11 totcalls=3180 retdays=36.43 income=NA eqpdays=126

custcare\_Mean=7 callwait\_Mean=4.666666667 iwylis\_vce\_Mean=18.66666667 callwait\_Range=3 ccrndmou\_Range=17 adjqty=3171

ovrrev\_Mean=0.075 rev\_Mean=59.18 ovrmou\_Mean=0.25 comp\_vce\_Mean=239.3333333 plcd\_vce\_Mean=322.3333333 avg3mou=1265 avgmou=793.4

avg3qty=451 avgqty=317.1 avg6mou=1039 avg6qty=412 crclscod=CA asl\_flag=Y prizm\_social\_one=U area=DALLAS AREA refurb\_new=N

hnd\_webcap=WCMB marital=U ethnic=R age1=0 age2=0 models=2 hnd\_price=59.98999023 actvsubs=1 uniqsubs=1 forgntvl=0 dwlltype=NA

dwllsize=NA mailordr=NA occu1=NA opk\_dat\_Mean=0 mtrcycle=0 numbcars=NA truck=0 roam\_Mean=0.2925 recv\_sms\_Mean=0 blck\_dat\_Mean=0

mou\_pead\_Mean=0 churn=1 proptype=NA mailresp=NA cartype=NA car\_buy=UNKNOWN children=NA csa=DALFTW817 da\_Mean=0 da\_Range=0

datovr\_Mean=0 datovr\_Range=0 div\_type=NA drop\_dat\_Mean=0 drop\_vce\_Mean=6.333333333 adjmou=7934 totrev=632.54 adjrev=552.56

avgrev=55.26 Customer\_ID=1068141 income1=. retdays1=. \_ERROR\_=1 \_N\_=94

NOTE: Mathematical operations could not be performed at the following places. The results of the operations have been set to

missing values.

Each place is given by: (Number of times) at (Line):(Column).

6094 at 379:11

NOTE: There were 25674 observations read from the data set WORK.TEMP1.

NOTE: The data set WORK.TEMP2 has 25674 observations and 80 variables.

NOTE: DATA statement used (Total process time):

real time 0.03 seconds

user cpu time 0.01 seconds

system cpu time 0.02 seconds

memory 3637.18k

OS Memory 44980.00k

Timestamp 07/01/2018 11:23:25 AM

Step Count 387 Switch Count 4

Page Faults 0

Page Reclaims 530

Page Swaps 0

Voluntary Context Switches 15

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 28000

382

383

384 data temp3(drop = income retdays);

385 set temp2;

386 run;

NOTE: There were 25674 observations read from the data set WORK.TEMP2.

NOTE: The data set WORK.TEMP3 has 25674 observations and 78 variables.

NOTE: DATA statement used (Total process time):

real time 0.02 seconds

user cpu time 0.00 seconds

system cpu time 0.01 seconds

memory 3627.62k

OS Memory 44980.00k

Timestamp 07/01/2018 11:23:25 AM

Step Count 388 Switch Count 4

Page Faults 0

Page Reclaims 531

Page Swaps 0

Voluntary Context Switches 20

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 27656

387

388 data temp4;

389 set temp3;

390 rename income1=income retdays1=retdays;

391 run;

NOTE: There were 25674 observations read from the data set WORK.TEMP3.

NOTE: The data set WORK.TEMP4 has 25674 observations and 78 variables.

NOTE: DATA statement used (Total process time):

real time 0.01 seconds

user cpu time 0.00 seconds

system cpu time 0.02 seconds

memory 3623.71k

OS Memory 44980.00k

Timestamp 07/01/2018 11:23:25 AM

Step Count 389 Switch Count 4

Page Faults 0

Page Reclaims 529

Page Swaps 0

Voluntary Context Switches 14

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 27656

392

393

394 data temp5;

395 set temp4;

396 test=1;

397 run;

NOTE: There were 25674 observations read from the data set WORK.TEMP4.

NOTE: The data set WORK.TEMP5 has 25674 observations and 79 variables.

NOTE: DATA statement used (Total process time):

real time 0.02 seconds

user cpu time 0.01 seconds

system cpu time 0.01 seconds

memory 3625.93k

OS Memory 44980.00k

Timestamp 07/01/2018 11:23:25 AM

Step Count 390 Switch Count 4

Page Faults 0

Page Reclaims 530

Page Swaps 0

Voluntary Context Switches 14

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 27920

398

399 proc means mean data = temp5;

400 var avg6mou avg6qty income retdays;

401 output out = temp5\_mean mean(avg6mou) = mean\_avg6mou mean(avg6qty)=mean\_avg6qty

402 mean(income) = mean\_income mean(retdays) = mean\_retdays;

403 run;

NOTE: There were 25674 observations read from the data set WORK.TEMP5.

NOTE: The data set WORK.TEMP5\_MEAN has 1 observations and 6 variables.

NOTE: PROCEDURE MEANS used (Total process time):

real time 0.02 seconds

user cpu time 0.02 seconds

system cpu time 0.00 seconds

memory 7928.53k

OS Memory 48328.00k

Timestamp 07/01/2018 11:23:26 AM

Step Count 391 Switch Count 5

Page Faults 0

Page Reclaims 1604

Page Swaps 0

Voluntary Context Switches 38

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 264

404

405 data temp5\_mean(drop = \_TYPE\_ \_FREQ\_);

406 set temp5\_mean;

407 test =1;

408 run;

NOTE: There were 1 observations read from the data set WORK.TEMP5\_MEAN.

NOTE: The data set WORK.TEMP5\_MEAN has 1 observations and 5 variables.

NOTE: DATA statement used (Total process time):

real time 0.00 seconds

user cpu time 0.00 seconds

system cpu time 0.00 seconds

memory 817.65k

OS Memory 42420.00k

Timestamp 07/01/2018 11:23:26 AM

Step Count 392 Switch Count 2

Page Faults 0

Page Reclaims 124

Page Swaps 0

Voluntary Context Switches 12

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 264

409

410 data temp\_merge;

411 merge temp5 temp5\_mean ;

412 by test;

413 run;

NOTE: There were 25674 observations read from the data set WORK.TEMP5.

NOTE: There were 1 observations read from the data set WORK.TEMP5\_MEAN.

NOTE: The data set WORK.TEMP\_MERGE has 25674 observations and 83 variables.

NOTE: DATA statement used (Total process time):

real time 0.02 seconds

user cpu time 0.00 seconds

system cpu time 0.02 seconds

memory 4066.21k

OS Memory 45240.00k

Timestamp 07/01/2018 11:23:26 AM

Step Count 393 Switch Count 4

Page Faults 0

Page Reclaims 568

Page Swaps 0

Voluntary Context Switches 14

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 29448

414

415 data temp\_merge1;

416 set temp\_merge;

417 if avg6mou=. then avg6mou\_1 = round(mean\_avg6mou,0.01);

418 else avg6mou\_1 = avg6mou;

419 if avg6qty =. then avg6qty\_1 = round(mean\_avg6qty,0.01);

420 else avg6qty\_1 = avg6qty;

421 if income = . then income\_1 = round(mean\_income,0.01);

422 else income\_1 = income;

423 if retdays = . then retdays\_1 = round(mean\_retdays,0.01);

424 else retdays\_1 = retdays;

425 run;

NOTE: Missing values were generated as a result of performing an operation on missing values.

Each place is given by: (Number of times) at (Line):(Column).

25674 at 423:33

NOTE: There were 25674 observations read from the data set WORK.TEMP\_MERGE.

NOTE: The data set WORK.TEMP\_MERGE1 has 25674 observations and 87 variables.

NOTE: DATA statement used (Total process time):

real time 0.02 seconds

user cpu time 0.01 seconds

system cpu time 0.02 seconds

memory 3658.31k

OS Memory 44980.00k

Timestamp 07/01/2018 11:23:26 AM

Step Count 394 Switch Count 4

Page Faults 0

Page Reclaims 529

Page Swaps 0

Voluntary Context Switches 14

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 31240

426

427 data temp\_merge2(drop = avg6qty avg6mou test mean\_avg6qty mean\_avg6mou income retdays mean\_income mean\_retdays);

428 set temp\_merge1;

429 run;

NOTE: There were 25674 observations read from the data set WORK.TEMP\_MERGE1.

NOTE: The data set WORK.TEMP\_MERGE2 has 25674 observations and 78 variables.

NOTE: DATA statement used (Total process time):

real time 0.02 seconds

user cpu time 0.00 seconds

system cpu time 0.02 seconds

memory 3634.96k

OS Memory 44980.00k

Timestamp 07/01/2018 11:23:26 AM

Step Count 395 Switch Count 4

Page Faults 0

Page Reclaims 529

Page Swaps 0

Voluntary Context Switches 17

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 27656

430

431 data temp\_merge3;

432 set temp\_merge2;

433 rename income\_1 = income retdays\_1 = retdays avg6mou\_1 =avg6mou avg6qty\_1=avg6qty;

434 run;

NOTE: There were 25674 observations read from the data set WORK.TEMP\_MERGE2.

NOTE: The data set WORK.TEMP\_MERGE3 has 25674 observations and 78 variables.

NOTE: DATA statement used (Total process time):

real time 0.02 seconds

user cpu time 0.00 seconds

system cpu time 0.01 seconds

memory 3625.00k

OS Memory 44980.00k

Timestamp 07/01/2018 11:23:26 AM

Step Count 396 Switch Count 4

Page Faults 0

Page Reclaims 530

Page Swaps 0

Voluntary Context Switches 14

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 27664

435 proc means n nmiss data = temp\_merge3;

436 run;

NOTE: There were 25674 observations read from the data set WORK.TEMP\_MERGE3.

NOTE: PROCEDURE MEANS used (Total process time):

real time 0.11 seconds

user cpu time 0.13 seconds

system cpu time 0.01 seconds

memory 7760.46k

OS Memory 48048.00k

Timestamp 07/01/2018 11:23:26 AM

Step Count 397 Switch Count 3

Page Faults 0

Page Reclaims 1534

Page Swaps 0

Voluntary Context Switches 88

Involuntary Context Switches 1

Block Input Operations 0

Block Output Operations 16

437 proc freq data =temp\_merge3;

438 tables

438 ! incomecrclscodasl\_flagprizm\_social\_onearearefurb\_newhnd\_webcapmaritalethnicdwlltypedwllsizemailordroccu1numb

438 ! carsretdaysproptypemailrespcartypecar\_buychildrencsadiv\_type;

439 run;

NOTE: There were 25674 observations read from the data set WORK.TEMP\_MERGE3.

NOTE: PROCEDURE FREQ used (Total process time):

real time 0.97 seconds

user cpu time 0.97 seconds

system cpu time 0.00 seconds

memory 2991.75k

OS Memory 43188.00k

Timestamp 07/01/2018 11:23:27 AM

Step Count 398 Switch Count 4

Page Faults 0

Page Reclaims 321

Page Swaps 0

Voluntary Context Switches 14

Involuntary Context Switches 1

Block Input Operations 0

Block Output Operations 816

440

441

442 /\*Taking backup\*/

443 data temp\_backup1;

444 set temp\_merge3;

445 run;

NOTE: There were 25674 observations read from the data set WORK.TEMP\_MERGE3.

NOTE: The data set WORK.TEMP\_BACKUP1 has 25674 observations and 78 variables.

NOTE: DATA statement used (Total process time):

real time 0.01 seconds

user cpu time 0.01 seconds

system cpu time 0.01 seconds

memory 3621.18k

OS Memory 44980.00k

Timestamp 07/01/2018 11:23:27 AM

Step Count 399 Switch Count 4

Page Faults 0

Page Reclaims 529

Page Swaps 0

Voluntary Context Switches 14

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 27656

446

447

448

449

450

451 /\*Data Preparation : Dummy Variables\*/

452 \*1.crclscod;

453 data temp\_dummy;

454 set temp\_backup1;

455 if substr(crclscod,1,1) = "A" or substr(crclscod,1,1) = "B" or substr(crclscod,1,1) = "C" or substr(crclscod,1,1) = "D"

455 ! or substr(crclscod,1,1) = "E"

456 then best\_crclscod = 1; else best\_crclscod = 0;

457 if substr(crclscod,1,1) = "F" or substr(crclscod,1,1) = "G" or substr(crclscod,1,1) = "H" or substr(crclscod,1,1) = "I"

457 ! or substr(crclscod,1,1) = "J"

458 then good\_crclscod = 1; else good\_crclscod = 0;

459 if substr(crclscod,1,1) = "K" or substr(crclscod,1,1) = "L" or substr(crclscod,1,1) = "M" or substr(crclscod,1,1) = "N"

459 ! or substr(crclscod,1,1) = "O"

460 then average\_crclscod = 1; else average\_crclscod = 0;

461 if substr(crclscod,1,1) = "P" or substr(crclscod,1,1) = "Q" or substr(crclscod,1,1) = "R" or substr(crclscod,1,1) = "S"

461 ! or substr(crclscod,1,1) = "T"

462 then bad\_crclscod = 1; else bad\_crclscod = 0;

463 if substr(crclscod,1,1) = "U" or substr(crclscod,1,1) = "V" or substr(crclscod,1,1) = "W" or substr(crclscod,1,1) = "X"

463 ! or substr(crclscod,1,1) = "Y"

464 or substr(crclscod,1,1) = "Z" then worst\_crclscod = 1; else worst\_crclscod = 0;

465

466

467 \*2.asl\_flag;

468

469 if asl\_flag = 'Y' then asl\_flag\_yes = 1;

470 else asl\_flag\_yes = 0;

471 if asl\_flag = 'N' then asl\_flag\_no = 1;

472 else asl\_flag\_no = 1;

473

474 \*3.prizm\_social\_one;

475

476 if prizm\_social\_one = 'C' then area\_city = 1;

477 else area\_city = 0;

478 if prizm\_social\_one = 'R' then area\_rural = 1;

479 else area\_rural = 0;

480 if prizm\_social\_one = 'S' then area\_suburban = 1;

481 else area\_suburban = 0;

482 if prizm\_social\_one = 'T' then area\_town = 1;

483 else area\_town = 0;

484 if prizm\_social\_one = 'U' then area\_urban = 1;

485 else area\_urban = 0;

486 if prizm\_social\_one = 'NA' then area\_unknown = 1;

487 else area\_unknown = 0;

488

489

490 \*4.refurb\_new;

491 if refurb\_new = 'N' then handset\_new = 1;

492 else handset\_new =0;

493 if refurb\_new = 'R' then handset\_refurb = 1;

494 else handset\_refurb = 0;

495

496

497 \*5.hnd\_webcap;

498 if hnd\_webcap = 'WC' then handset\_wc = 1;

499 else handset\_wc = 0;

500 if hnd\_webcap = 'WCMB' then handset\_wcmb = 1;

501 else handset\_wcmb = 0;

502 if hnd\_webcap = 'NA' then handset\_na = 1;

503 else handset\_na = 0;

504 if hnd\_webcap = 'UNKW' then handset\_unkw = 1;

505 else handset\_unkw = 0;

506

507

508 \*6.marital;

509 if marital = 'M' then status\_married = 1;

510 else status\_married = 0;

511 if marital = 'A' then status\_infermarried =1;

512 else status\_infermarried =0;

513 if marital = 'B' then status\_infersingle =1;

514 else status\_infersingle =0;

515 if marital = 'S' or marital = 'B' then status\_single = 1;

516 else status\_single = 0;

517 if marital = 'U' then status\_unknown = 1;

518 else status\_unknown = 0;

519

520

521 \*7.dwlltype;

522 if index(dwlltype,'M')>0 then dwell\_multiple = 1;

523 else dwell\_multiple = 1;

524 if index(dwlltype,'S')>0 then dwell\_single = 1;

525 else dwell\_single = 1;

526 if index(dwlltype,'NA')>0 then dwell\_unknown = 1;

527 else dwell\_unknown = 1;

528

529 \*8.dwllsize;

530 if index(dwllsize,'A') > 0 then dsize\_1 = 1;

531 else dsize\_1 = 0;

532 if index(dwllsize,'B') > 0 then dsize\_2 = 1;

533 else dsize\_2 = 0;

534 if index(dwllsize,'C') > 0 then dsize\_3 = 1;

535 else dsize\_3 = 0;

536 if index(dwllsize,'D') > 0 then dsize\_4 = 1;

537 else dsize\_4 = 0;

538 if index(dwllsize,'E') > 0 then dsize\_5 = 1;

539 else dsize\_5 = 0;

540 if index(dwllsize,'F') > 0 then dsize\_6 = 1;

541 else dsize\_6 = 0;

542 if index(dwllsize,'G') > 0 then dsize\_7 = 1;

543 else dsize\_7 = 0;

544 if index(dwllsize,'H') > 0 then dsize\_8 = 1;

545 else dsize\_8 = 0;

546 if index(dwllsize,'I') > 0 then dsize\_9 = 1;

547 else dsize\_9 = 0;

548 if index(dwllsize,'J') > 0 then dsize\_10to19 = 1;

549 else dsize\_10to19 = 0;

550 if index(dwllsize,'K') > 0 then dsize\_20to29 = 1;

551 else dsize\_20to29 = 0;

552 if index(dwllsize,'L') > 0 then dsize\_30to39 = 1;

553 else dsize\_30to39 = 0;

554 if index(dwllsize,'M') > 0 then dsize\_40to49 = 1;

555 else dsize\_40to49 = 0;

556 if index(dwllsize,'N') > 0 then dsize\_50to99 = 1;

557 else dsize\_50to99 = 0;

558 if index(dwllsize,'O') > 0 then dsize\_100 = 1;

559 else dsize\_100 = 0;

560 if index(dwllsize,'NA') > 0 then dsize\_unknown = 1;

561 else dsize\_unknown = 0;

562

563 \*9.mailordr;

564 if index(mailordr,'B')>0 then mailorder\_buyer = 1;

565 else mailorder\_buyer = 0;

566 if index(mailordr,'NA')>0 then mailorder\_unknown = 1;

567 else mailorder\_unknown = 0;

568

569 \*10.occu1;

570 if index(occu1,'1')>0 then occu\_technical = 1;

571 else occu\_technical = 0;

572 if index(occu1,'2')>0 then occu\_admin = 1;

573 else occu\_admin = 0;

574 if index(occu1,'3')>0 then occu\_sales = 1;

575 else occu\_sales = 0;

576 if index(occu1,'4')>0 then occu\_wc = 1;

577 else occu\_wc = 0;

578 if index(occu1,'5')>0 then occu\_bc = 1;

579 else occu\_bc = 0;

580 if index(occu1,'6')>0 then occu\_student = 1;

581 else occu\_student = 0;

582 if index(occu1,'7')>0 then occu\_homemaker = 1;

583 else occu\_homemaker = 0;

584 if index(occu1,'8')>0 then occu\_retires = 1;

585 else occu\_retires = 0;

586 if index(occu1,'9')>0 then occu\_farmer = 1;

587 else occu\_farmer = 0;

588 if index(occu1,'A')>0 then occu\_military = 1;

589 else occu\_military = 0;

590 if index(occu1,'B')>0 then occu\_religious = 1;

591 else occu\_religious = 0;

592 if index(occu1,'C')>0 or index(occu1,'D')>0 or index(occu1,'E')>0 or

593 index(occu1,'F')>0 or index(occu1,'G')>0 or index(occu1,'H')>0 or

594 index(occu1,'I')>0 or index(occu1,'J')>0 or index(occu1,'K')>0

595 then occu\_selfemp = 1;else occu\_selfemp = 0;

596

597

598 \*11.numbcars;

599 if index(numbcars,'1')>0 then numcars\_1 = 1;

600 else numcars\_1 = 0;

601 if index(numbcars,'2')>0 then numcars\_2 = 1;

602 else numcars\_2 = 0;

603 if index(numbcars,'3')>0 then numcars\_3 = 1;

604 else numcars\_3 = 0;

605 if index(numbcars,'NA')>0 then numcars\_unknown = 1;

606 else numcars\_unknown = 0;

607

608 \*12.proptype;

609 if index(proptype,'A')>0 then proptype\_a = 1;

610 else proptype\_a = 0;

611 if index(proptype,'B')>0 then proptype\_b = 1;

612 else proptype\_b = 0;

613 if index(proptype,'D')>0 then proptype\_d = 1;

614 else proptype\_d = 0;

615 if index(proptype,'E')>0 then proptype\_e = 1;

616 else proptype\_e = 0;

617 if index(proptype,'G')>0 then proptype\_g = 1;

618 else proptype\_g = 0;

619 if index(proptype,'M')>0 then proptype\_m = 1;

620 else proptype\_m = 0;

621 if index(proptype,'NA')>0 then proptype\_unknown = 1;

622 else proptype\_unknown = 0;

623

624 \*13.mailresp;

625 if index(mailresp,'R')>0 then mailresp\_yes=1;

626 else mailresp\_yes = 0;

627 if index(mailresp,'NA')>0 then mailresp\_unknown=1;

628 else mailresp\_unknown = 0;

629

630 \*14.cartype;

631 if index(cartype,'A')>0 then cartype\_luxury = 1;

632 else cartype\_luxury = 0;

633 if index(cartype,'B')>0 then cartype\_truck = 1;

634 else cartype\_truck = 0;

635 if index(cartype,'C')>0 then cartype\_SUV = 1;

636 else cartype\_SUV = 0;

637 if index(cartype,'D')>0 then cartype\_minivan = 1;

638 else cartype\_minivan = 0;

639 if index(cartype,'E')>0 then cartype\_regular = 1;

640 else cartype\_regular = 0;

641 if index(cartype,'F')>0 then cartype\_upper = 1;

642 else cartype\_upper = 0;

643 if index(cartype,'G')>0 then cartype\_basic = 1;

644 else cartype\_basic = 0;

645 if index(cartype,'NA')>0 then cartype\_unknown = 1;

646 else cartype\_unknown = 0;

647

648 \*15.div\_type;

649 if index(div\_type,'BTH')>0 then division\_bth = 1;

650 else division\_bth = 0;

651 if index(div\_type,'LDD')>0 then division\_LDD = 1;

652 else division\_LDD = 0;

653 if index(div\_type,'LTD')>0 then division\_LTD = 1;

654 else division\_LTD = 0;

655 if index(div\_type,'NA')>0 then division\_unknown = 1;

656 else division\_unknown = 0;

657

658

659 \*16.ethnic;

660 if index(ethnic,'B')>0 then ethnic\_asian\_nor = 1;

661 else ethnic\_asian\_nor = 0;

662 if index(ethnic,'D')>0 then ethnic\_south\_euro = 1;

663 else ethnic\_south\_euro = 0;

664 if index(ethnic,'F')>0 then ethnic\_french = 1;

665 else ethnic\_french = 0;

666 if index(ethnic,'G')>0 then ethnic\_german = 1;

667 else ethnic\_german = 0;

668 if index(ethnic,'H')>0 then ethnic\_hispanic = 1;

669 else ethnic\_hispanic = 0;

670 if index(ethnic,'I')>0 then ethnic\_italian = 1;

671 else ethnic\_italian = 0;

672 if index(ethnic,'J')>0 then ethnic\_jewish = 1;

673 else ethnic\_jewish = 0;

674 if index(ethnic,'M')>0 then ethnic\_misc = 1;

675 else ethnic\_misc = 0;

676 if index(ethnic,'N')>0 then ethnic\_north\_euro = 1;

677 else ethnic\_north\_euro = 0;

678 if index(ethnic,'O')>0 then ethnic\_asian = 1;

679 else ethnic\_asian = 0;

680 if index(ethnic,'P')>0 then ethnic\_polynesia = 1;

681 else ethnic\_polynesia = 0;

682 if index(ethnic,'R')>0 then ethnic\_arab = 1;

683 else ethnic\_arab = 0;

684 if index(ethnic,'S')>0 then ethnic\_scot\_iris = 1;

685 else ethnic\_scot\_iris = 0;

686 if index(ethnic,'U')>0 or index(ethnic,'NA')then ethnic\_unknown = 1;

687 else ethnic\_unknown = 0;

688 if index(ethnic,'Z')>0 then ethnic\_afro\_amer = 1;

689 else ethnic\_afro\_amer = 0;

690

691 /\*17.children\*/

692 if index(children,'Y')>0 then children\_yes = 1;

693 else children\_yes= 0;

694 if index(children,'N')>0 then children\_no = 1;

695 else children\_no= 0;

696 if index(children,'NA')>0 then children\_unknown = 1;

697 else children\_unknown= 0;

698

699

700 \*18.car\_buy;

701 if index(car\_buy,'NEW')>0 then car\_buy\_new = 1;

702 else car\_buy\_new=0;

703 if index(car\_buy,'UNKNOWN')>0 or index(car\_buy,'NA') then car\_buy\_unknown = 1;

704 else car\_buy\_unknown=0;

705 \*run;

706

707 \*19.Area;

708 if index(area,'ATLANTIC SOUTH AREA')>0 then area\_atlantic = 1;

709 else area\_atlantic = 0;

710 if index(area,'CALIFORNIA NORTH AREA')>0 then area\_cali = 1;

711 else area\_cali = 0;

712 if index(area,'CENTRAL/SOUTH TEXAS AREA')>0 then area\_texas = 1;

713 else area\_texas = 0;

714 if index(area,'CHICAGO AREA')>0 then area\_chicago = 1;

715 else area\_chicago = 0;

716 if index(area,'DALLAS AREA')>0 then area\_dallas = 1;

717 else area\_dallas = 0;

718 if index(area,'DC/MARYLAND/VIRGINIA AREA')>0 then area\_dcmvir = 1;

719 else area\_dcmvir = 0;

720 if index(area,'GREAT LAKES AREA')>0 then area\_gla = 1;

721 else area\_gla = 0;

722 if index(area,'HOUSTON AREA')>0 then area\_houston = 1;

723 else area\_houston = 0;

724 if index(area,'LOS ANGELES AREA')>0 then area\_la = 1;

725 else area\_la = 0;

726 if index(area,'MIDWEST AREA')>0 then area\_mdwest = 1;

727 else area\_mdwest = 0;

728 if index(area,'NA')>0 then area\_unknown = 1;

729 else area\_unknown = 0;

730 if index(area,'NEW ENGLAND AREA')>0 then area\_neweng = 1;

731 else area\_neweng = 0;

732 if index(area,'NEW YORK CITY AREA')>0 then area\_nyc = 1;

733 else area\_nyc = 0;

734 if index(area,'NORTH FLORIDA AREA')>0 then area\_nfl = 1;

735 else area\_nfl = 0;

736 if index(area,'NORTHWEST/ROCKY MOUNTAIN AREA')>0 then area\_nrocky = 1;

737 else area\_nrocky = 0;

738 if index(area,'OHIO AREA')>0 then area\_ohio = 1;

739 else area\_ohio = 0;

740 if index(area,'PHILADELPHIA AREA')>0 then area\_phily = 1;

741 else area\_phily = 0;

742 if index(area,'SOUTH FLORIDA AREA')>0 then area\_sfl = 1;

743 else area\_sfl = 0;

744 if index(area,'SOUTHWEST AREA')>0 then area\_swest = 1;

745 else area\_swest = 0;

746 if index(area,'TENNESSEE AREA')>0 then area\_tenese = 1;

747 else area\_tenese = 0;

748

749

750 \*20.csa;

751 if substr(csa,1,1) = "A" or substr(csa,1,1) = "B" or substr(csa,1,1) = "C" or substr(csa,1,1) = "D"

752 or substr(csa,1,1) = "F" or substr(csa,1,1) = "G" then csa\_city1 = 1;

753 else csa\_city1 = 0;

754 if substr(csa,1,1) = "H" or substr(csa,1,1) = "I" or substr(csa,1,1) = "K"

755 or substr(csa,1,1) = "L" or substr(csa,1,1) = "M" then csa\_city2 = 1;

756 else csa\_city2 = 0;

757 if substr(csa,1,1) = "N" or substr(csa,1,1) = "O" or substr(csa,1,1) = "P" or substr(csa,1,1) = "S"

758 or substr(csa,1,1) = "V" then csa\_city3 = 1;

759 else csa\_city3 = 0;

760 run;

NOTE: There were 25674 observations read from the data set WORK.TEMP\_BACKUP1.

NOTE: The data set WORK.TEMP\_DUMMY has 25674 observations and 202 variables.

NOTE: DATA statement used (Total process time):

real time 0.12 seconds

user cpu time 0.09 seconds

system cpu time 0.04 seconds

memory 4025.15k

OS Memory 45296.00k

Timestamp 07/01/2018 11:23:27 AM

Step Count 400 Switch Count 4

Page Faults 0

Page Reclaims 613

Page Swaps 0

Voluntary Context Switches 17

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 77640

761

762

763 data temp\_backp2;

764 set temp\_dummy;

765 run;

NOTE: There were 25674 observations read from the data set WORK.TEMP\_DUMMY.

NOTE: The data set WORK.TEMP\_BACKP2 has 25674 observations and 202 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.01 seconds

system cpu time 0.04 seconds

memory 3685.81k

OS Memory 44980.00k

Timestamp 07/01/2018 11:23:27 AM

Step Count 401 Switch Count 8

Page Faults 0

Page Reclaims 530

Page Swaps 0

Voluntary Context Switches 28

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 77584

766

767

768 data temp\_backup3(drop =

768 ! crclscodasl\_flagprizm\_social\_onerefurb\_newhnd\_webcapmaritalethnicdwlltypedwllsizemailordroccu1numbcarsproptyp

768 ! emailrespcartypecar\_buychildrendiv\_type area csa);

769 set temp\_backp2;

770 run;

NOTE: There were 25674 observations read from the data set WORK.TEMP\_BACKP2.

NOTE: The data set WORK.TEMP\_BACKUP3 has 25674 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.01 seconds

system cpu time 0.04 seconds

memory 3687.59k

OS Memory 44980.00k

Timestamp 07/01/2018 11:23:27 AM

Step Count 402 Switch Count 8

Page Faults 0

Page Reclaims 529

Page Swaps 0

Voluntary Context Switches 24

Involuntary Context Switches 1

Block Input Operations 0

Block Output Operations 73992

771

772 proc means n nmiss data = temp\_backup3;

773 run;

NOTE: There were 25674 observations read from the data set WORK.TEMP\_BACKUP3.

NOTE: PROCEDURE MEANS used (Total process time):

real time 0.30 seconds

user cpu time 0.34 seconds

system cpu time 0.01 seconds

memory 8949.65k

OS Memory 48060.00k

Timestamp 07/01/2018 11:23:27 AM

Step Count 403 Switch Count 6

Page Faults 0

Page Reclaims 1537

Page Swaps 0

Voluntary Context Switches 216

Involuntary Context Switches 1

Block Input Operations 0

Block Output Operations 40

774

775

776 proc freq data =temp\_merge3;

777 tables

777 ! incomecrclscodasl\_flagprizm\_social\_onearearefurb\_newhnd\_webcapmaritalethnicdwlltypedwllsizemailordroccu1numb

777 ! carsretdaysproptypemailrespcartypecar\_buychildrencsadiv\_type;

778 run;

NOTE: There were 25674 observations read from the data set WORK.TEMP\_MERGE3.

NOTE: PROCEDURE FREQ used (Total process time):

real time 0.93 seconds

user cpu time 0.93 seconds

system cpu time 0.00 seconds

memory 3010.28k

OS Memory 43188.00k

Timestamp 07/01/2018 11:23:28 AM

Step Count 404 Switch Count 4

Page Faults 0

Page Reclaims 319

Page Swaps 0

Voluntary Context Switches 17

Involuntary Context Switches 1

Block Input Operations 0

Block Output Operations 832

779

780

781 /\*outlier detection for variables:

782 actvsubs

783 adjmou

784 adjqty

785 adjrev

786 age1

787 age2

788 avg3mou

789 avg3qty

790 avg6mou

791 avg6qty

792 avgmou

793 avgqty

794 avgrev

795 callwait\_Mean

796 callwait\_Range

797 ccrndmou\_Range

798 change\_mou

799 comp\_vce\_Mean

800 custcare\_Mean

801 da\_Mean

802 da\_Range

803 datovr\_Mean

804 datovr\_Range

805 drop\_blk\_Mean

806 drop\_dat\_Mean

807 drop\_vce\_Mean

808 drop\_vce\_Range

809 eqpdays

810 iwylis\_vce\_Mean

811 months

812 mou\_mean

813 mou\_opkv\_Range

814 mou\_pead\_Mean

815 mou\_Range

816 opk\_dat\_Mean

817 ovrmou\_Mean

818 ovrrev\_Mean

819 owylis\_vce\_Range

820 plcd\_vce\_Mean

821 recv\_sms\_Mean

822 rev\_Mean

823 rev\_Range

824 roam\_Mean

825 totcalls

826 totmrc\_mean

827 totrev

828 uniqsubs

829 blck\_dat\_Mean

830 \*/

831 proc univariate data = temp\_backup3;

832 var mou\_mean;

833 output out=percentile1\_99 pctlpts=99.9 pctlpre=percentile;

834 histogram mou\_mean;

835 run;

NOTE: The data set WORK.PERCENTILE1\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.22 seconds

user cpu time 0.13 seconds

system cpu time 0.02 seconds

memory 18865.25k

OS Memory 55688.00k

Timestamp 07/01/2018 11:23:28 AM

Step Count 405 Switch Count 7

Page Faults 0

Page Reclaims 4072

Page Swaps 0

Voluntary Context Switches 224

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 1072

836

837 /\*Above 99.9 percentile values to be deleted i.e. 3765\*/

838 data temp\_out;

839 set temp\_backup3;

840 if mou\_mean ge 3765 then delete;

841 run;

NOTE: There were 25674 observations read from the data set WORK.TEMP\_BACKUP3.

NOTE: The data set WORK.TEMP\_OUT has 25646 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.01 seconds

system cpu time 0.03 seconds

memory 3658.81k

OS Memory 57012.00k

Timestamp 07/01/2018 11:23:28 AM

Step Count 406 Switch Count 7

Page Faults 0

Page Reclaims 533

Page Swaps 0

Voluntary Context Switches 27

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 73992

842

843 proc univariate data = temp\_out;

844 var totmrc\_mean;

845 output out=percentile2\_99 pctlpts=99.9 pctlpre=percentile;

846 histogram totmrc\_mean;

847 run;

NOTE: The data set WORK.PERCENTILE2\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.19 seconds

user cpu time 0.11 seconds

system cpu time 0.01 seconds

memory 9050.71k

OS Memory 57872.00k

Timestamp 07/01/2018 11:23:29 AM

Step Count 407 Switch Count 7

Page Faults 0

Page Reclaims 1151

Page Swaps 0

Voluntary Context Switches 215

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 672

848 /\*Above 99.9 percentile values to be deleted i.e. 189.99\*/

849 data temp\_out;

850 set temp\_out;

851 if totmrc\_mean > 189.99 then delete;

852 run;

NOTE: There were 25646 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT has 25623 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.01 seconds

system cpu time 0.04 seconds

memory 3658.81k

OS Memory 57268.00k

Timestamp 07/01/2018 11:23:29 AM

Step Count 408 Switch Count 7

Page Faults 0

Page Reclaims 529

Page Swaps 0

Voluntary Context Switches 23

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 73992

853

854 proc univariate data = temp\_out;

855 var rev\_Range;

856 output out=percentile3\_99 pctlpts=99.9 pctlpre=percentile;

857 histogram rev\_range;

858 run;

NOTE: The data set WORK.PERCENTILE3\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.19 seconds

user cpu time 0.11 seconds

system cpu time 0.01 seconds

memory 9260.84k

OS Memory 57616.00k

Timestamp 07/01/2018 11:23:29 AM

Step Count 409 Switch Count 7

Page Faults 0

Page Reclaims 1071

Page Swaps 0

Voluntary Context Switches 210

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 696

859 /\*Above 99.9 percentile values to be deleted i.e. 671.05\*/

860 data temp\_out;

861 set temp\_out;

862 if rev\_Range > 671.05 then delete;

863 run;

NOTE: There were 25623 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT has 25602 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.01 seconds

system cpu time 0.04 seconds

memory 3652.50k

OS Memory 57268.00k

Timestamp 07/01/2018 11:23:29 AM

Step Count 410 Switch Count 7

Page Faults 0

Page Reclaims 529

Page Swaps 0

Voluntary Context Switches 23

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 73736

864

865 proc univariate data = temp\_out;

866 var mou\_Range;

867 output out=percentile4\_99 pctlpts=99.9 pctlpre=percentile;

868 Histogram mou\_range;

869 run;

NOTE: The data set WORK.PERCENTILE4\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.19 seconds

user cpu time 0.11 seconds

system cpu time 0.01 seconds

memory 8971.21k

OS Memory 57872.00k

Timestamp 07/01/2018 11:23:29 AM

Step Count 411 Switch Count 7

Page Faults 0

Page Reclaims 1015

Page Swaps 0

Voluntary Context Switches 213

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 680

870 /\*Above 99.9 percentile values to be deleted i.e. 3317\*/

871 data temp\_out;

872 set temp\_out;

873 if mou\_Range >3317 then delete;

874 run;

NOTE: There were 25602 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT has 25573 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.01 seconds

system cpu time 0.04 seconds

memory 3651.40k

OS Memory 57524.00k

Timestamp 07/01/2018 11:23:29 AM

Step Count 412 Switch Count 7

Page Faults 0

Page Reclaims 530

Page Swaps 0

Voluntary Context Switches 23

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 73736

875

876 proc univariate data = temp\_out;

877 var change\_mou;

878 output out=percentile5\_99 pctlpts=99.9 pctlpre=percentile;

879 Histogram change\_mou;

880 run;

NOTE: The data set WORK.PERCENTILE5\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.19 seconds

user cpu time 0.11 seconds

system cpu time 0.01 seconds

memory 8982.03k

OS Memory 57616.00k

Timestamp 07/01/2018 11:23:29 AM

Step Count 413 Switch Count 7

Page Faults 0

Page Reclaims 964

Page Swaps 0

Voluntary Context Switches 211

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 680

881 /\*Above 99.9 percentile values to be deleted i.e. 1387.25\*/

882 data temp\_out;

883 set temp\_out;

884 if change\_mou >1387.25 then delete;

885 run;

NOTE: There were 25573 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT has 25540 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.01 seconds

system cpu time 0.04 seconds

memory 3653.90k

OS Memory 57524.00k

Timestamp 07/01/2018 11:23:29 AM

Step Count 414 Switch Count 7

Page Faults 0

Page Reclaims 529

Page Swaps 0

Voluntary Context Switches 23

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 73744

886

887 proc univariate data = temp\_out;

888 var drop\_blk\_Mean;

889 output out=percentile6\_99 pctlpts=99.9 pctlpre=percentile;

890 Histogram drop\_blk\_mean;

891 run;

NOTE: The data set WORK.PERCENTILE6\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.18 seconds

user cpu time 0.10 seconds

system cpu time 0.01 seconds

memory 8904.15k

OS Memory 57616.00k

Timestamp 07/01/2018 11:23:30 AM

Step Count 415 Switch Count 7

Page Faults 0

Page Reclaims 959

Page Swaps 0

Voluntary Context Switches 210

Involuntary Context Switches 1

Block Input Operations 0

Block Output Operations 680

892 /\*Above 99.9 percentile values to be deleted i.e. 157\*/

893 data temp\_out;

894 set temp\_out;

895 if drop\_blk\_Mean >157 then delete;

896 run;

NOTE: There were 25540 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT has 25518 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.00 seconds

system cpu time 0.04 seconds

memory 3651.15k

OS Memory 57524.00k

Timestamp 07/01/2018 11:23:30 AM

Step Count 416 Switch Count 7

Page Faults 0

Page Reclaims 529

Page Swaps 0

Voluntary Context Switches 25

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 73480

897

898 proc univariate data = temp\_out;

899 var drop\_vce\_Range;

900 output out=percentile7\_99 pctlpts=99.9 pctlpre=percentile;

901 \*Histogram drop\_vce\_mean;

902 run;

NOTE: The data set WORK.PERCENTILE7\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.06 seconds

user cpu time 0.05 seconds

system cpu time 0.01 seconds

memory 2417.96k

OS Memory 55732.00k

Timestamp 07/01/2018 11:23:30 AM

Step Count 417 Switch Count 7

Page Faults 0

Page Reclaims 310

Page Swaps 0

Voluntary Context Switches 23

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 288

903 /\*Above 99.9 percentile values to be deleted i.e. 79\*/

904 data temp\_out;

905 set temp\_out;

906 if drop\_vce\_Range > 79 then delete;

907 run;

NOTE: There were 25518 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT has 25492 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.00 seconds

system cpu time 0.03 seconds

memory 3651.15k

OS Memory 57524.00k

Timestamp 07/01/2018 11:23:30 AM

Step Count 418 Switch Count 7

Page Faults 0

Page Reclaims 530

Page Swaps 0

Voluntary Context Switches 26

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 73480

908

909 proc univariate data = temp\_out;

910 var owylis\_vce\_Range;

911 output out=percentile8\_99 pctlpts=99.9 pctlpre=percentile;

912 histogram owylis\_vce\_range;

913 run;

NOTE: The data set WORK.PERCENTILE8\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.19 seconds

user cpu time 0.11 seconds

system cpu time 0.02 seconds

memory 8788.34k

OS Memory 57616.00k

Timestamp 07/01/2018 11:23:30 AM

Step Count 419 Switch Count 7

Page Faults 0

Page Reclaims 926

Page Swaps 0

Voluntary Context Switches 209

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 688

914 /\*Above 99.9 percentile values to be deleted i.e. 214\*/

915 data temp\_out;

916 set temp\_out;

917 if owylis\_vce\_Range >214 then delete;

918 run;

NOTE: There were 25492 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT has 25469 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.01 seconds

system cpu time 0.04 seconds

memory 3651.09k

OS Memory 57524.00k

Timestamp 07/01/2018 11:23:30 AM

Step Count 420 Switch Count 7

Page Faults 0

Page Reclaims 529

Page Swaps 0

Voluntary Context Switches 23

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 73480

919

920 proc univariate data = temp\_out;

921 var mou\_opkv\_Range;

922 output out=percentile9\_99 pctlpts=99.9 pctlpre=percentile;

923 \*Histogram mou\_pokv\_range;

924 run;

NOTE: The data set WORK.PERCENTILE9\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.07 seconds

user cpu time 0.06 seconds

system cpu time 0.01 seconds

memory 3183.37k

OS Memory 55732.00k

Timestamp 07/01/2018 11:23:30 AM

Step Count 421 Switch Count 7

Page Faults 0

Page Reclaims 309

Page Swaps 0

Voluntary Context Switches 29

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 272

925 /\*Above 99.9 percentile values to be deleted i.e. 1505.12\*/

926 data temp\_out;

927 set temp\_out;

928 if mou\_opkv\_Range >1505.12 then delete;

929 run;

NOTE: There were 25469 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT has 25444 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.00 seconds

system cpu time 0.03 seconds

memory 3661.31k

OS Memory 57524.00k

Timestamp 07/01/2018 11:23:30 AM

Step Count 422 Switch Count 7

Page Faults 0

Page Reclaims 529

Page Swaps 0

Voluntary Context Switches 26

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 73480

930

931 proc univariate data = temp\_out;

932 var months;

933 output out=percentile10\_99 pctlpts=99.9 pctlpre=percentile;

934 Histogram months;

935 run;

NOTE: The data set WORK.PERCENTILE10\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.19 seconds

user cpu time 0.11 seconds

system cpu time 0.01 seconds

memory 8765.93k

OS Memory 57616.00k

Timestamp 07/01/2018 11:23:30 AM

Step Count 423 Switch Count 7

Page Faults 0

Page Reclaims 964

Page Swaps 0

Voluntary Context Switches 211

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 704

936 /\*Above 99.9 percentile values to be deleted i.e. 58\*/

937 data temp\_out;

938 set temp\_out;

939 if months>58 then delete;

940 run;

NOTE: There were 25444 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT has 25433 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.01 seconds

system cpu time 0.04 seconds

memory 3651.09k

OS Memory 57524.00k

Timestamp 07/01/2018 11:23:30 AM

Step Count 424 Switch Count 7

Page Faults 0

Page Reclaims 530

Page Swaps 0

Voluntary Context Switches 24

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 73224

941

942 proc univariate data = temp\_out;

943 var totcalls;

944 output out=percentile11\_99 pctlpts=99.9 pctlpre=percentile;

945 Histogram totcalls;

946 run;

NOTE: The data set WORK.PERCENTILE11\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.19 seconds

user cpu time 0.11 seconds

system cpu time 0.01 seconds

memory 9244.59k

OS Memory 57872.00k

Timestamp 07/01/2018 11:23:31 AM

Step Count 425 Switch Count 7

Page Faults 0

Page Reclaims 1000

Page Swaps 0

Voluntary Context Switches 210

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 680

947 /\*Above 99.9 percentile values to be deleted i.e. 39755\*/

948 data temp\_out;

949 set temp\_out;

950 if totcalls>39755 then delete;

951 run;

NOTE: There were 25433 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT has 25403 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.00 seconds

system cpu time 0.04 seconds

memory 3651.21k

OS Memory 57524.00k

Timestamp 07/01/2018 11:23:31 AM

Step Count 426 Switch Count 7

Page Faults 0

Page Reclaims 530

Page Swaps 0

Voluntary Context Switches 27

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 73224

952

953 proc univariate data = temp\_out;

954 var eqpdays;

955 output out=percentile12\_99 pctlpts=99.9 pctlpre=percentile;

956 Histogram eqpdays;

957 run;

NOTE: The data set WORK.PERCENTILE12\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.19 seconds

user cpu time 0.10 seconds

system cpu time 0.01 seconds

memory 8977.53k

OS Memory 57872.00k

Timestamp 07/01/2018 11:23:31 AM

Step Count 427 Switch Count 7

Page Faults 0

Page Reclaims 994

Page Swaps 0

Voluntary Context Switches 210

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 688

958

959 /\*Above 99.9 percentile values to be deleted i.e. 1506\*/

960 data temp\_out;

961 set temp\_out;

962 if eqpdays>1506 then delete;

963 if eqpdays <= 0 then delete;

964 run;

NOTE: There were 25403 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT has 25343 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.01 seconds

system cpu time 0.04 seconds

memory 3648.59k

OS Memory 57524.00k

Timestamp 07/01/2018 11:23:31 AM

Step Count 428 Switch Count 7

Page Faults 0

Page Reclaims 530

Page Swaps 0

Voluntary Context Switches 23

Involuntary Context Switches 6

Block Input Operations 0

Block Output Operations 72968

965

966 proc univariate data = temp\_out;

967 var custcare\_Mean;

968 output out=percentile13\_99 pctlpts=99.9 pctlpre=percentile;

969 Histogram custcare\_mean;

970 run;

NOTE: The data set WORK.PERCENTILE13\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.18 seconds

user cpu time 0.11 seconds

system cpu time 0.01 seconds

memory 8882.46k

OS Memory 57616.00k

Timestamp 07/01/2018 11:23:31 AM

Step Count 429 Switch Count 7

Page Faults 0

Page Reclaims 961

Page Swaps 0

Voluntary Context Switches 211

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 680

971 /\*Above 99.9 percentile values to be deleted i.e. 47.33333333\*/

972 data temp\_out;

973 set temp\_out;

974 if custcare\_Mean>47.33333333 then delete;

975 run;

NOTE: There were 25343 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT has 25321 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.01 seconds

system cpu time 0.03 seconds

memory 3643.59k

OS Memory 57524.00k

Timestamp 07/01/2018 11:23:31 AM

Step Count 430 Switch Count 7

Page Faults 0

Page Reclaims 529

Page Swaps 0

Voluntary Context Switches 23

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 72968

976

977 proc univariate data = temp\_out;

978 var callwait\_Mean;

979 output out=percentile14\_99 pctlpts=99.9 pctlpre=percentile;

980 Histogram callwait\_mean;

981 run;

NOTE: The data set WORK.PERCENTILE14\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.18 seconds

user cpu time 0.11 seconds

system cpu time 0.01 seconds

memory 8766.53k

OS Memory 57872.00k

Timestamp 07/01/2018 11:23:31 AM

Step Count 431 Switch Count 7

Page Faults 0

Page Reclaims 1012

Page Swaps 0

Voluntary Context Switches 211

Involuntary Context Switches 1

Block Input Operations 0

Block Output Operations 688

982 /\*Above 99.9 percentile values to be deleted i.e. 48.66666667\*/

983 data temp\_out;

984 set temp\_out;

985 if callwait\_Mean>48.66666667 then delete;

986 run;

NOTE: There were 25321 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT has 25300 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.01 seconds

system cpu time 0.04 seconds

memory 3652.21k

OS Memory 57524.00k

Timestamp 07/01/2018 11:23:31 AM

Step Count 432 Switch Count 7

Page Faults 0

Page Reclaims 529

Page Swaps 0

Voluntary Context Switches 24

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 72976

987

988 proc univariate data = temp\_out;

989 var iwylis\_vce\_Mean;

990 output out=percentile15\_99 pctlpts=99.9 pctlpre=percentile;

991 Histogram iwylis\_vce\_mean;

992 run;

NOTE: The data set WORK.PERCENTILE15\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.18 seconds

user cpu time 0.11 seconds

system cpu time 0.01 seconds

memory 8796.50k

OS Memory 57616.00k

Timestamp 07/01/2018 11:23:31 AM

Step Count 433 Switch Count 7

Page Faults 0

Page Reclaims 979

Page Swaps 0

Voluntary Context Switches 211

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 688

993 /\*Above 99.9 percentile values to be deleted i.e.137\*/

994 data temp\_out;

995 set temp\_out;

996 if iwylis\_vce\_Mean>137 then delete;

997 run;

NOTE: There were 25300 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT has 25274 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.01 seconds

system cpu time 0.04 seconds

memory 3647.28k

OS Memory 57524.00k

Timestamp 07/01/2018 11:23:32 AM

Step Count 434 Switch Count 7

Page Faults 0

Page Reclaims 530

Page Swaps 0

Voluntary Context Switches 23

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 72968

998

999 proc univariate data = temp\_out;

1000 var callwait\_Range;

1001 output out=percentile16\_99 pctlpts=99.9 pctlpre=percentile;

1002 HIstogram callwait\_range;

1003 run;

NOTE: The data set WORK.PERCENTILE16\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.20 seconds

user cpu time 0.10 seconds

system cpu time 0.01 seconds

memory 8777.56k

OS Memory 58128.00k

Timestamp 07/01/2018 11:23:32 AM

Step Count 435 Switch Count 7

Page Faults 0

Page Reclaims 1053

Page Swaps 0

Voluntary Context Switches 210

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 672

1004 /\*Above 99.9 percentile values to be deleted i.e.36\*/

1005 data temp\_out;

1006 set temp\_out;

1007 if callwait\_Range>36 then delete;

1008 run;

NOTE: There were 25274 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT has 25251 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.00 seconds

system cpu time 0.04 seconds

memory 3647.59k

OS Memory 57780.00k

Timestamp 07/01/2018 11:23:32 AM

Step Count 436 Switch Count 7

Page Faults 0

Page Reclaims 529

Page Swaps 0

Voluntary Context Switches 23

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 72712

1009

1010 proc univariate data = temp\_out;

1011 var ccrndmou\_Range;

1012 output out=percentile17\_99 pctlpts=99.9 pctlpre=percentile;

1013 Histogram ccrndmou\_range;

1014 run;

NOTE: The data set WORK.PERCENTILE17\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.18 seconds

user cpu time 0.11 seconds

system cpu time 0.02 seconds

memory 8810.37k

OS Memory 57872.00k

Timestamp 07/01/2018 11:23:32 AM

Step Count 437 Switch Count 7

Page Faults 0

Page Reclaims 999

Page Swaps 0

Voluntary Context Switches 210

Involuntary Context Switches 1

Block Input Operations 0

Block Output Operations 688

1015 /\*Above 99.9 percentile values to be deleted i.e.171\*/

1016 data temp\_out;

1017 set temp\_out;

1018 if ccrndmou\_Range>171 then delete;

1019 run;

NOTE: There were 25251 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT has 25229 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.01 seconds

system cpu time 0.03 seconds

memory 3656.18k

OS Memory 57780.00k

Timestamp 07/01/2018 11:23:32 AM

Step Count 438 Switch Count 7

Page Faults 0

Page Reclaims 530

Page Swaps 0

Voluntary Context Switches 23

Involuntary Context Switches 1

Block Input Operations 0

Block Output Operations 72712

1020

1021 proc univariate data = temp\_out;

1022 var adjqty;

1023 output out=percentile18\_99 pctlpts=99.9 pctlpre=percentile;

1024 Histogram adjqty;

1025 run;

NOTE: The data set WORK.PERCENTILE18\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.19 seconds

user cpu time 0.10 seconds

system cpu time 0.01 seconds

memory 9247.18k

OS Memory 58640.00k

Timestamp 07/01/2018 11:23:32 AM

Step Count 439 Switch Count 7

Page Faults 0

Page Reclaims 1126

Page Swaps 0

Voluntary Context Switches 211

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 680

1026 /\*Above 99.9 percentile values to be deleted i.e.31034\*/

1027 data temp\_out;

1028 set temp\_out;

1029 if adjqty>31034 then delete;

1030 run;

NOTE: There were 25229 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT has 25207 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.01 seconds

system cpu time 0.03 seconds

memory 3656.25k

OS Memory 57780.00k

Timestamp 07/01/2018 11:23:32 AM

Step Count 440 Switch Count 7

Page Faults 0

Page Reclaims 530

Page Swaps 0

Voluntary Context Switches 23

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 72720

1031

1032 proc univariate data = temp\_out;

1033 var ovrrev\_Mean;

1034 output out=percentile19\_99 pctlpts=99.9 pctlpre=percentile;

1035 Histogram ovrrev\_mean;

1036 run;

NOTE: The data set WORK.PERCENTILE19\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.18 seconds

user cpu time 0.11 seconds

system cpu time 0.01 seconds

memory 9148.75k

OS Memory 58384.00k

Timestamp 07/01/2018 11:23:32 AM

Step Count 441 Switch Count 7

Page Faults 0

Page Reclaims 1077

Page Swaps 0

Voluntary Context Switches 213

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 680

1037 /\*Above 99.9 percentile values to be deleted i.e.245.35\*/

1038 data temp\_out;

1039 set temp\_out;

1040 if ovrrev\_Mean>245.35 then delete;

1041 run;

NOTE: There were 25207 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT has 25181 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.01 seconds

system cpu time 0.04 seconds

memory 3656.06k

OS Memory 58036.00k

Timestamp 07/01/2018 11:23:32 AM

Step Count 442 Switch Count 7

Page Faults 0

Page Reclaims 529

Page Swaps 0

Voluntary Context Switches 23

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 72712

1042

1043 proc univariate data = temp\_out;

1044 var rev\_Mean;

1045 output out=percentile20\_99 pctlpts=99.9 pctlpre=percentile;

1046 Histogram rev\_mean;

1047 run;

NOTE: The data set WORK.PERCENTILE20\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.20 seconds

user cpu time 0.11 seconds

system cpu time 0.01 seconds

memory 9406.25k

OS Memory 58896.00k

Timestamp 07/01/2018 11:23:33 AM

Step Count 443 Switch Count 7

Page Faults 0

Page Reclaims 1169

Page Swaps 0

Voluntary Context Switches 210

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 680

1048 /\*Above 99.9 percentile values to be deleted i.e.322.38\*/

1049 data temp\_out;

1050 set temp\_out;

1051 if rev\_Mean>322.38 then delete;

1052 run;

NOTE: There were 25181 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT has 25175 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.00 seconds

system cpu time 0.04 seconds

memory 3655.40k

OS Memory 58036.00k

Timestamp 07/01/2018 11:23:33 AM

Step Count 444 Switch Count 7

Page Faults 0

Page Reclaims 529

Page Swaps 0

Voluntary Context Switches 23

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 72712

1053

1054 proc univariate data = temp\_out;

1055 var ovrmou\_Mean;

1056 output out=percentile21\_99 pctlpts=99.9 pctlpre=percentile;

1057 Histogram ovrmou\_mean;

1058 run;

NOTE: The data set WORK.PERCENTILE21\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.19 seconds

user cpu time 0.10 seconds

system cpu time 0.02 seconds

memory 9101.87k

OS Memory 58640.00k

Timestamp 07/01/2018 11:23:33 AM

Step Count 445 Switch Count 7

Page Faults 0

Page Reclaims 1061

Page Swaps 0

Voluntary Context Switches 213

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 688

1059 /\*Above 99.9 percentile values to be deleted i.e.701\*/

1060 data temp\_out;

1061 set temp\_out;

1062 if ovrmou\_Mean>701 then delete;

1063 run;

NOTE: There were 25175 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT has 25161 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.00 seconds

system cpu time 0.03 seconds

memory 3646.96k

OS Memory 58292.00k

Timestamp 07/01/2018 11:23:33 AM

Step Count 446 Switch Count 7

Page Faults 0

Page Reclaims 529

Page Swaps 0

Voluntary Context Switches 23

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 72456

1064

1065 proc univariate data = temp\_out;

1066 var comp\_vce\_Mean;

1067 output out=percentile22\_99 pctlpts=99.9 pctlpre=percentile;

1068 Histogram comp\_vce\_mean;

1069 run;

NOTE: The data set WORK.PERCENTILE22\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.21 seconds

user cpu time 0.10 seconds

system cpu time 0.02 seconds

memory 8799.28k

OS Memory 58896.00k

Timestamp 07/01/2018 11:23:33 AM

Step Count 447 Switch Count 7

Page Faults 0

Page Reclaims 1080

Page Swaps 0

Voluntary Context Switches 216

Involuntary Context Switches 1

Block Input Operations 0

Block Output Operations 696

1070 /\*Above 99.9 percentile values to be deleted i.e.878\*/

1071 data temp\_out;

1072 set temp\_out;

1073 if comp\_vce\_Mean>878 then delete;

1074 run;

NOTE: There were 25161 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT has 25155 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.01 seconds

system cpu time 0.04 seconds

memory 3640.40k

OS Memory 58292.00k

Timestamp 07/01/2018 11:23:33 AM

Step Count 448 Switch Count 7

Page Faults 0

Page Reclaims 529

Page Swaps 0

Voluntary Context Switches 27

Involuntary Context Switches 1

Block Input Operations 0

Block Output Operations 72456

1075

1076 proc univariate data = temp\_out;

1077 var plcd\_vce\_Mean;

1078 output out=percentile23\_99 pctlpts=99.9 pctlpre=percentile;

1079 Histogram plcd\_vce\_mean;

1080 run;

NOTE: The data set WORK.PERCENTILE23\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.18 seconds

user cpu time 0.11 seconds

system cpu time 0.01 seconds

memory 8966.40k

OS Memory 58640.00k

Timestamp 07/01/2018 11:23:33 AM

Step Count 449 Switch Count 7

Page Faults 0

Page Reclaims 1086

Page Swaps 0

Voluntary Context Switches 211

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 688

1081 /\*Above 99.9 percentile values to be deleted i.e.1040\*/

1082 data temp\_out;

1083 set temp\_out;

1084 if plcd\_vce\_Mean>1040 then delete;

1085 run;

NOTE: There were 25155 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT has 25150 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.01 seconds

system cpu time 0.04 seconds

memory 3640.40k

OS Memory 58292.00k

Timestamp 07/01/2018 11:23:33 AM

Step Count 450 Switch Count 7

Page Faults 0

Page Reclaims 529

Page Swaps 0

Voluntary Context Switches 23

Involuntary Context Switches 1

Block Input Operations 0

Block Output Operations 72464

1086

1087 proc univariate data = temp\_out;

1088 var avg3mou;

1089 output out=percentile24\_99 pctlpts=99.9 pctlpre=percentile;

1090 Histogram avg3mou;

1091 run;

NOTE: The data set WORK.PERCENTILE24\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.18 seconds

user cpu time 0.11 seconds

system cpu time 0.01 seconds

memory 8856.34k

OS Memory 59408.00k

Timestamp 07/01/2018 11:23:34 AM

Step Count 451 Switch Count 7

Page Faults 0

Page Reclaims 1116

Page Swaps 0

Voluntary Context Switches 222

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 688

1092 /\*Above 99.9 percentile values to be deleted i.e.3273\*/

1093 data temp\_out;

1094 set temp\_out;

1095 if avg3mou>3273 then delete;

1096 run;

NOTE: There were 25150 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT has 25143 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.01 seconds

system cpu time 0.03 seconds

memory 3639.87k

OS Memory 58548.00k

Timestamp 07/01/2018 11:23:34 AM

Step Count 452 Switch Count 7

Page Faults 0

Page Reclaims 529

Page Swaps 0

Voluntary Context Switches 24

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 72456

1097

1098 proc univariate data = temp\_out;

1099 var avgmou;

1100 output out=percentile25\_99 pctlpts=99.9 pctlpre=percentile;

1101 Histogram avgmou;

1102 run;

NOTE: The data set WORK.PERCENTILE25\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.20 seconds

user cpu time 0.11 seconds

system cpu time 0.02 seconds

memory 10040.15k

OS Memory 60176.00k

Timestamp 07/01/2018 11:23:34 AM

Step Count 453 Switch Count 7

Page Faults 0

Page Reclaims 1339

Page Swaps 0

Voluntary Context Switches 211

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 688

1103 /\*Above 99.9 percentile values to be deleted i.e.2694\*/

1104 data temp\_out;

1105 set temp\_out;

1106 if avgmou>2694 then delete;

1107 run;

NOTE: There were 25143 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT has 25119 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.00 seconds

system cpu time 0.03 seconds

memory 3639.00k

OS Memory 58804.00k

Timestamp 07/01/2018 11:23:34 AM

Step Count 454 Switch Count 7

Page Faults 0

Page Reclaims 529

Page Swaps 0

Voluntary Context Switches 23

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 72456

1108

1109 proc univariate data = temp\_out;

1110 var avg3qty;

1111 output out=percentile26\_99 pctlpts=99.9 pctlpre=percentile;

1112 Histogram avg3qty;

1113 run;

NOTE: The data set WORK.PERCENTILE26\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.19 seconds

user cpu time 0.11 seconds

system cpu time 0.02 seconds

memory 8921.34k

OS Memory 59664.00k

Timestamp 07/01/2018 11:23:34 AM

Step Count 455 Switch Count 7

Page Faults 0

Page Reclaims 1082

Page Swaps 0

Voluntary Context Switches 211

Involuntary Context Switches 2

Block Input Operations 0

Block Output Operations 688

1114 /\*Above 99.9 percentile values to be deleted i.e.2694\*/

1115 data temp\_out;

1116 set temp\_out;

1117 if avg3qty>2694 then delete;

1118 run;

NOTE: There were 25119 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT has 25119 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.01 seconds

system cpu time 0.04 seconds

memory 3639.84k

OS Memory 58804.00k

Timestamp 07/01/2018 11:23:34 AM

Step Count 456 Switch Count 7

Page Faults 0

Page Reclaims 529

Page Swaps 0

Voluntary Context Switches 23

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 72456

1119

1120 proc univariate data = temp\_out;

1121 var avgqty;

1122 output out=percentile27\_99 pctlpts=99.9 pctlpre=percentile;

1123 Histogram avgqty;

1124 run;

NOTE: The data set WORK.PERCENTILE27\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.20 seconds

user cpu time 0.11 seconds

system cpu time 0.02 seconds

memory 9543.75k

OS Memory 60176.00k

Timestamp 07/01/2018 11:23:34 AM

Step Count 457 Switch Count 7

Page Faults 0

Page Reclaims 1257

Page Swaps 0

Voluntary Context Switches 210

Involuntary Context Switches 1

Block Input Operations 0

Block Output Operations 688

1125 /\*Above 99.9 percentile values to be deleted i.e.1191\*/

1126 data temp\_out;

1127 set temp\_out;

1128 if avgqty>1191 then delete;

1129 run;

NOTE: There were 25119 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT has 25112 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.01 seconds

system cpu time 0.03 seconds

memory 3639.84k

OS Memory 59060.00k

Timestamp 07/01/2018 11:23:34 AM

Step Count 458 Switch Count 7

Page Faults 0

Page Reclaims 529

Page Swaps 0

Voluntary Context Switches 23

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 72456

1130

1131 proc univariate data = temp\_out;

1132 var actvsubs;

1133 output out=percentile28\_99 pctlpts=99.9 pctlpre=percentile;

1134 Histogram actvsubs;

1135 run;

NOTE: The data set WORK.PERCENTILE28\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.19 seconds

user cpu time 0.11 seconds

system cpu time 0.01 seconds

memory 8898.90k

OS Memory 59920.00k

Timestamp 07/01/2018 11:23:35 AM

Step Count 459 Switch Count 7

Page Faults 0

Page Reclaims 1072

Page Swaps 0

Voluntary Context Switches 211

Involuntary Context Switches 1

Block Input Operations 0

Block Output Operations 680

1136 /\*Above 99.9 percentile values to be deleted i.e.5\*/

1137 data temp\_out;

1138 set temp\_out;

1139 if actvsubs>5 then delete;

1140 run;

NOTE: There were 25112 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT has 25107 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.01 seconds

system cpu time 0.04 seconds

memory 3639.68k

OS Memory 59316.00k

Timestamp 07/01/2018 11:23:35 AM

Step Count 460 Switch Count 7

Page Faults 0

Page Reclaims 529

Page Swaps 0

Voluntary Context Switches 28

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 72456

1141

1142

1143 proc univariate data = temp\_out;

1144 var uniqsubs;

1145 output out=percentile29\_99 pctlpts=99.9 pctlpre=percentile;

1146 Histogram uniqsubs;

1147 run;

NOTE: The data set WORK.PERCENTILE29\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.18 seconds

user cpu time 0.11 seconds

system cpu time 0.01 seconds

memory 8957.06k

OS Memory 59664.00k

Timestamp 07/01/2018 11:23:35 AM

Step Count 461 Switch Count 7

Page Faults 0

Page Reclaims 1080

Page Swaps 0

Voluntary Context Switches 214

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 672

1148 /\*Above 99.9 percentile values to be deleted i.e.7\*/

1149 data temp\_out;

1150 set temp\_out;

1151 if uniqsubs>7 then delete;

1152 run;

NOTE: There were 25107 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT has 25093 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.01 seconds

system cpu time 0.04 seconds

memory 3646.15k

OS Memory 59316.00k

Timestamp 07/01/2018 11:23:35 AM

Step Count 462 Switch Count 7

Page Faults 0

Page Reclaims 529

Page Swaps 0

Voluntary Context Switches 23

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 72456

1153

1154 proc univariate data = temp\_out;

1155 var opk\_dat\_Mean;

1156 output out=percentile30\_99 pctlpts=99.9 pctlpre=percentile;

1157 HIstogram opk\_dat\_mean;

1158 run;

NOTE: The data set WORK.PERCENTILE30\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.18 seconds

user cpu time 0.11 seconds

system cpu time 0.01 seconds

memory 8872.71k

OS Memory 59920.00k

Timestamp 07/01/2018 11:23:35 AM

Step Count 463 Switch Count 7

Page Faults 0

Page Reclaims 1063

Page Swaps 0

Voluntary Context Switches 211

Involuntary Context Switches 1

Block Input Operations 0

Block Output Operations 688

1159 /\*Above 99.9 percentile values to be deleted i.e.59\*/

1160 data temp\_out;

1161 set temp\_out;

1162 if opk\_dat\_Mean>59 then delete;

1163 run;

NOTE: There were 25093 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT has 25070 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.01 seconds

system cpu time 0.04 seconds

memory 3646.93k

OS Memory 59316.00k

Timestamp 07/01/2018 11:23:35 AM

Step Count 464 Switch Count 7

Page Faults 0

Page Reclaims 529

Page Swaps 0

Voluntary Context Switches 23

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 72200

1164

1165 proc univariate data = temp\_out;

1166 var roam\_Mean;

1167 output out=percentile31\_99 pctlpts=99.9 pctlpre=percentile;

1168 Histogram roam\_mean;

1169 run;

NOTE: The data set WORK.PERCENTILE31\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.19 seconds

user cpu time 0.10 seconds

system cpu time 0.02 seconds

memory 8855.03k

OS Memory 59920.00k

Timestamp 07/01/2018 11:23:35 AM

Step Count 465 Switch Count 7

Page Faults 0

Page Reclaims 1107

Page Swaps 0

Voluntary Context Switches 210

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 680

1170 /\*Above 99.9 percentile values to be deleted i.e.76\*/

1171 data temp\_out;

1172 set temp\_out;

1173 if roam\_Mean>76 then delete;

1174 run;

NOTE: There were 25070 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT has 25055 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.01 seconds

system cpu time 0.04 seconds

memory 3646.78k

OS Memory 59316.00k

Timestamp 07/01/2018 11:23:35 AM

Step Count 466 Switch Count 7

Page Faults 0

Page Reclaims 529

Page Swaps 0

Voluntary Context Switches 23

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 72200

1175

1176 proc univariate data = temp\_out;

1177 var recv\_sms\_Mean;

1178 output out=percentile32\_99 pctlpts=99.9 pctlpre=percentile;

1179 Histogram recv\_sms\_mean;

1180 run;

NOTE: The data set WORK.PERCENTILE32\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.19 seconds

user cpu time 0.11 seconds

system cpu time 0.02 seconds

memory 8876.18k

OS Memory 60176.00k

Timestamp 07/01/2018 11:23:36 AM

Step Count 467 Switch Count 7

Page Faults 0

Page Reclaims 1107

Page Swaps 0

Voluntary Context Switches 215

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 680

1181 /\*Above 99.9 percentile values to be deleted i.e.9\*/

1182 data temp\_out;

1183 set temp\_out;

1184 if recv\_sms\_Mean>9 then delete;

1185 run;

NOTE: There were 25055 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT has 25028 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.00 seconds

system cpu time 0.04 seconds

memory 3646.18k

OS Memory 59572.00k

Timestamp 07/01/2018 11:23:36 AM

Step Count 468 Switch Count 7

Page Faults 0

Page Reclaims 529

Page Swaps 0

Voluntary Context Switches 24

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 72208

1186

1187 proc univariate data = temp\_out;

1188 var mou\_pead\_Mean;

1189 output out=percentile33\_99 pctlpts=99.9 pctlpre=percentile;

1190 Histogram mou\_pead\_mean;

1191 run;

NOTE: The data set WORK.PERCENTILE33\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.19 seconds

user cpu time 0.11 seconds

system cpu time 0.01 seconds

memory 8945.87k

OS Memory 60176.00k

Timestamp 07/01/2018 11:23:36 AM

Step Count 469 Switch Count 7

Page Faults 0

Page Reclaims 1099

Page Swaps 0

Voluntary Context Switches 211

Involuntary Context Switches 1

Block Input Operations 0

Block Output Operations 680

1192 /\*Above 99.9 percentile values to be deleted i.e.82\*/

1193 data temp\_out;

1194 set temp\_out;

1195 if mou\_pead\_Mean>82 then delete;

1196 run;

NOTE: There were 25028 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT has 25004 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.00 seconds

system cpu time 0.04 seconds

memory 3646.62k

OS Memory 59828.00k

Timestamp 07/01/2018 11:23:36 AM

Step Count 470 Switch Count 7

Page Faults 0

Page Reclaims 529

Page Swaps 0

Voluntary Context Switches 27

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 72200

1197

1198 proc univariate data = temp\_out;

1199 var da\_Mean;

1200 output out=percentile34\_99 pctlpts=99.9 pctlpre=percentile;

1201 Histogram da\_mean;

1202 run;

NOTE: The data set WORK.PERCENTILE34\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.18 seconds

user cpu time 0.11 seconds

system cpu time 0.01 seconds

memory 8764.12k

OS Memory 60432.00k

Timestamp 07/01/2018 11:23:36 AM

Step Count 471 Switch Count 7

Page Faults 0

Page Reclaims 1060

Page Swaps 0

Voluntary Context Switches 213

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 680

1203 /\*Above 99.9 percentile values to be deleted i.e.19\*/

1204 data temp\_out;

1205 set temp\_out;

1206 if da\_Mean>19 then delete;

1207 run;

NOTE: There were 25004 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT has 24976 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.00 seconds

system cpu time 0.04 seconds

memory 3646.21k

OS Memory 59828.00k

Timestamp 07/01/2018 11:23:36 AM

Step Count 472 Switch Count 7

Page Faults 0

Page Reclaims 529

Page Swaps 0

Voluntary Context Switches 23

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 71944

1208

1209 proc univariate data = temp\_out;

1210 var da\_Range;

1211 output out=percentile35\_99 pctlpts=99.9 pctlpre=percentile;

1212 \*HISTOGRAM da-range;

1213 run;

NOTE: The data set WORK.PERCENTILE35\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.06 seconds

user cpu time 0.06 seconds

system cpu time 0.01 seconds

memory 2418.84k

OS Memory 58036.00k

Timestamp 07/01/2018 11:23:36 AM

Step Count 473 Switch Count 7

Page Faults 0

Page Reclaims 319

Page Swaps 0

Voluntary Context Switches 27

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 280

1214 /\*Above 99.9 percentile values to be deleted i.e.22\*/

1215 data temp\_out;

1216 set temp\_out;

1217 if da\_Range>22 then delete;

1218 run;

NOTE: There were 24976 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT has 24948 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.00 seconds

system cpu time 0.03 seconds

memory 3646.06k

OS Memory 59828.00k

Timestamp 07/01/2018 11:23:36 AM

Step Count 474 Switch Count 7

Page Faults 0

Page Reclaims 529

Page Swaps 0

Voluntary Context Switches 23

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 71944

1219

1220 proc univariate data = temp\_out;

1221 var datovr\_Mean;

1222 output out=percentile36\_99 pctlpts=99.9 pctlpre=percentile;

1223 Histogram datovr\_mean;

1224 run;

NOTE: The data set WORK.PERCENTILE36\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.18 seconds

user cpu time 0.11 seconds

system cpu time 0.02 seconds

memory 8781.62k

OS Memory 60432.00k

Timestamp 07/01/2018 11:23:36 AM

Step Count 475 Switch Count 7

Page Faults 0

Page Reclaims 1116

Page Swaps 0

Voluntary Context Switches 211

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 696

1225 /\*Above 99.9 percentile values to be deleted i.e.24\*/

1226 data temp\_out;

1227 set temp\_out;

1228 if datovr\_Mean>24 then delete;

1229 run;

NOTE: There were 24948 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT has 24916 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.00 seconds

system cpu time 0.03 seconds

memory 3646.06k

OS Memory 60084.00k

Timestamp 07/01/2018 11:23:36 AM

Step Count 476 Switch Count 7

Page Faults 0

Page Reclaims 529

Page Swaps 0

Voluntary Context Switches 23

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 71952

1230

1231 proc univariate data = temp\_out;

1232 var datovr\_Range ;

1233 output out=percentile37\_99 pctlpts=99.9 pctlpre=percentile;

1234 Histogram datovr\_range;

1235 run;

NOTE: The data set WORK.PERCENTILE37\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.18 seconds

user cpu time 0.11 seconds

system cpu time 0.01 seconds

memory 8893.12k

OS Memory 60688.00k

Timestamp 07/01/2018 11:23:37 AM

Step Count 477 Switch Count 7

Page Faults 0

Page Reclaims 1067

Page Swaps 0

Voluntary Context Switches 210

Involuntary Context Switches 1

Block Input Operations 0

Block Output Operations 680

1236 /\*Above 99.9 percentile values to be deleted i.e.46\*/

1237 data temp\_out;

1238 set temp\_out;

1239 if datovr\_Range>46 then delete;

1240 run;

NOTE: There were 24916 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT has 24881 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.01 seconds

system cpu time 0.03 seconds

memory 3639.68k

OS Memory 60084.00k

Timestamp 07/01/2018 11:23:37 AM

Step Count 478 Switch Count 7

Page Faults 0

Page Reclaims 550

Page Swaps 0

Voluntary Context Switches 27

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 71696

1241

1242 proc univariate data = temp\_out;

1243 var drop\_dat\_Mean;

1244 output out=percentile38\_99 pctlpts=99.9 pctlpre=percentile;

1245 Histogram drop\_dat\_mean;

1246 run;

NOTE: The data set WORK.PERCENTILE38\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.18 seconds

user cpu time 0.11 seconds

system cpu time 0.01 seconds

memory 8982.84k

OS Memory 60944.00k

Timestamp 07/01/2018 11:23:37 AM

Step Count 479 Switch Count 7

Page Faults 0

Page Reclaims 1134

Page Swaps 0

Voluntary Context Switches 211

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 680

1247 /\*Above 99.9 percentile values to be deleted i.e.4\*/

1248 data temp\_out;

1249 set temp\_out;

1250 if drop\_dat\_Mean>4 then delete;

1251 run;

NOTE: There were 24881 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT has 24858 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.01 seconds

system cpu time 0.04 seconds

memory 3646.68k

OS Memory 60596.00k

Timestamp 07/01/2018 11:23:37 AM

Step Count 480 Switch Count 7

Page Faults 0

Page Reclaims 530

Page Swaps 0

Voluntary Context Switches 22

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 71688

1252

1253 proc univariate data = temp\_out;

1254 var drop\_vce\_Mean;

1255 output out=percentile39\_99 pctlpts=99.9 pctlpre=percentile;

1256 Histogram drop\_vce\_mean;

1257 run;

NOTE: The data set WORK.PERCENTILE39\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.18 seconds

user cpu time 0.11 seconds

system cpu time 0.01 seconds

memory 8896.40k

OS Memory 61200.00k

Timestamp 07/01/2018 11:23:37 AM

Step Count 481 Switch Count 7

Page Faults 0

Page Reclaims 1052

Page Swaps 0

Voluntary Context Switches 211

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 688

1258 /\*Above 99.9 percentile values to be deleted i.e.77\*/

1259 data tepm\_out;

1260 set temp\_out;

1261 if drop\_vce\_Mean>77 then delete;

1262 run;

NOTE: There were 24858 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEPM\_OUT has 24843 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.01 seconds

system cpu time 0.03 seconds

memory 3647.00k

OS Memory 60596.00k

Timestamp 07/01/2018 11:23:37 AM

Step Count 482 Switch Count 7

Page Faults 0

Page Reclaims 529

Page Swaps 0

Voluntary Context Switches 25

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 71688

1263

1264 proc univariate data = temp\_out;

1265 var adjmou;

1266 output out=percentile40\_99 pctlpts=99.9 pctlpre=percentile;

1267 Histogram adjmou;

1268 run;

NOTE: The data set WORK.PERCENTILE40\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.19 seconds

user cpu time 0.11 seconds

system cpu time 0.02 seconds

memory 9387.87k

OS Memory 61712.00k

Timestamp 07/01/2018 11:23:37 AM

Step Count 483 Switch Count 7

Page Faults 0

Page Reclaims 1154

Page Swaps 0

Voluntary Context Switches 213

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 680

1269 /\*Above 99.9 percentile values to be deleted i.e.75256\*/

1270 data temp\_out;

1271 set temp\_out;

1272 if adjmou>75256 then delete;

1273 run;

NOTE: There were 24858 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT has 24852 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.01 seconds

system cpu time 0.03 seconds

memory 3646.34k

OS Memory 60852.00k

Timestamp 07/01/2018 11:23:37 AM

Step Count 484 Switch Count 7

Page Faults 0

Page Reclaims 529

Page Swaps 0

Voluntary Context Switches 26

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 71688

1274

1275 proc univariate data = temp\_out;

1276 var totrev;

1277 output out=percentile41\_99 pctlpts=99.9 pctlpre=percentile;

1278 Histogram totrev;

1279 run;

NOTE: The data set WORK.PERCENTILE41\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.21 seconds

user cpu time 0.12 seconds

system cpu time 0.01 seconds

memory 10046.90k

OS Memory 62480.00k

Timestamp 07/01/2018 11:23:38 AM

Step Count 485 Switch Count 7

Page Faults 0

Page Reclaims 1285

Page Swaps 0

Voluntary Context Switches 211

Involuntary Context Switches 1

Block Input Operations 0

Block Output Operations 680

1280 /\*Above 99.9 percentile values to be deleted i.e.6687\*/

1281 data temp\_out;

1282 set temp\_out;

1283 if totrev>6687 then delete;

1284 run;

NOTE: There were 24852 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT has 24835 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.01 seconds

system cpu time 0.04 seconds

memory 3646.78k

OS Memory 61108.00k

Timestamp 07/01/2018 11:23:38 AM

Step Count 486 Switch Count 7

Page Faults 0

Page Reclaims 529

Page Swaps 0

Voluntary Context Switches 26

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 71696

1285

1286 proc univariate data = temp\_out;

1287 var adjrev;

1288 output out=percentile42\_99 pctlpts=99.9 pctlpre=percentile;

1289 Histogram adjrev;

1290 run;

NOTE: The data set WORK.PERCENTILE42\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.20 seconds

user cpu time 0.12 seconds

system cpu time 0.02 seconds

memory 9853.78k

OS Memory 62480.00k

Timestamp 07/01/2018 11:23:38 AM

Step Count 487 Switch Count 7

Page Faults 0

Page Reclaims 1225

Page Swaps 0

Voluntary Context Switches 215

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 688

1291 /\*Above 99.9 percentile values to be deleted i.e.5739\*/

1292 data temp\_out;

1293 set temp\_out;

1294 if adjrev>5739 then delete;

1295 run;

NOTE: There were 24835 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT has 24808 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.00 seconds

system cpu time 0.03 seconds

memory 3646.59k

OS Memory 61108.00k

Timestamp 07/01/2018 11:23:38 AM

Step Count 488 Switch Count 7

Page Faults 0

Page Reclaims 529

Page Swaps 0

Voluntary Context Switches 27

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 71432

1296

1297 proc univariate data = temp\_out;

1298 var avgrev;

1299 output out=percentile43\_99 pctlpts=99.9 pctlpre=percentile;

1300 Histogram avgrev;

1301 run;

NOTE: The data set WORK.PERCENTILE43\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.19 seconds

user cpu time 0.12 seconds

system cpu time 0.01 seconds

memory 9314.09k

OS Memory 61712.00k

Timestamp 07/01/2018 11:23:38 AM

Step Count 489 Switch Count 7

Page Faults 0

Page Reclaims 1091

Page Swaps 0

Voluntary Context Switches 212

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 688

1302 /\*Above 99.9 percentile values to be deleted i.e.246\*/

1303 data temp\_out;

1304 set temp\_out;

1305 if avgrev>246 then delete;

1306 run;

NOTE: There were 24808 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT has 24792 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.00 seconds

system cpu time 0.04 seconds

memory 3646.59k

OS Memory 60852.00k

Timestamp 07/01/2018 11:23:38 AM

Step Count 490 Switch Count 7

Page Faults 0

Page Reclaims 529

Page Swaps 0

Voluntary Context Switches 23

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 71432

1307

1308 proc univariate data = temp\_out;

1309 var avg6mou;

1310 output out=percentile44\_99 pctlpts=99.9 pctlpre=percentile;

1311 HISTOGRAM avg6mou;

1312 run;

NOTE: The data set WORK.PERCENTILE44\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.19 seconds

user cpu time 0.11 seconds

system cpu time 0.02 seconds

memory 8857.09k

OS Memory 61456.00k

Timestamp 07/01/2018 11:23:38 AM

Step Count 491 Switch Count 7

Page Faults 0

Page Reclaims 1084

Page Swaps 0

Voluntary Context Switches 212

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 696

1313 /\*Above 99.9 percentile values to be deleted i.e.2648\*/

1314 data temp\_out;

1315 set temp\_out;

1316 if avg6mou>2648 then delete;

1317 run;

NOTE: There were 24792 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT has 24779 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.01 seconds

system cpu time 0.03 seconds

memory 3646.12k

OS Memory 61108.00k

Timestamp 07/01/2018 11:23:38 AM

Step Count 492 Switch Count 7

Page Faults 0

Page Reclaims 529

Page Swaps 0

Voluntary Context Switches 27

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 71432

1318

1319 proc univariate data = temp\_out;

1320 var avg6qty;

1321 output out=percentile45\_99 pctlpts=99.9 pctlpre=percentile;

1322 Histogram avg6qty;

1323 run;

NOTE: The data set WORK.PERCENTILE45\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.18 seconds

user cpu time 0.11 seconds

system cpu time 0.01 seconds

memory 8921.50k

OS Memory 61968.00k

Timestamp 07/01/2018 11:23:39 AM

Step Count 493 Switch Count 7

Page Faults 0

Page Reclaims 1037

Page Swaps 0

Voluntary Context Switches 211

Involuntary Context Switches 2

Block Input Operations 0

Block Output Operations 688

1324 /\*Above 99.9 percentile values to be deleted i.e.1055\*/

1325 data temp\_out;

1326 set temp\_out;

1327 if avg6qty>1055 then delete;

1328 run;

NOTE: There were 24779 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT has 24766 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.01 seconds

system cpu time 0.04 seconds

memory 3646.78k

OS Memory 61364.00k

Timestamp 07/01/2018 11:23:39 AM

Step Count 494 Switch Count 7

Page Faults 0

Page Reclaims 530

Page Swaps 0

Voluntary Context Switches 24

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 71432

1329

1330 proc univariate data = temp\_out;

1331 var blck\_dat\_Mean;

1332 output out=percentile46\_99 pctlpts=99.9 pctlpre=percentile;

1333 Histogram blck\_dat\_mean;

1334 run;

NOTE: The data set WORK.PERCENTILE46\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.19 seconds

user cpu time 0.10 seconds

system cpu time 0.02 seconds

memory 9016.18k

OS Memory 61968.00k

Timestamp 07/01/2018 11:23:39 AM

Step Count 495 Switch Count 7

Page Faults 0

Page Reclaims 1115

Page Swaps 0

Voluntary Context Switches 223

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 680

1335 /\*Above 99.9 percentile values to be deleted i.e.2\*/

1336 data temp\_out;

1337 set temp\_out;

1338 if blck\_dat\_Mean>2 then delete;

1339 run;

NOTE: There were 24766 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT has 24743 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.00 seconds

system cpu time 0.04 seconds

memory 3646.09k

OS Memory 61364.00k

Timestamp 07/01/2018 11:23:39 AM

Step Count 496 Switch Count 7

Page Faults 0

Page Reclaims 529

Page Swaps 0

Voluntary Context Switches 26

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 71440

1340

1341 /\*Outliers detection in age1 and age2\*/

1342 proc univariate data = temp\_out;

1343 var age1;

1344 output out=percentile47\_99 pctlpts=99.9 pctlpre=percentile;

1345 Histogram age1;

1346 run;

NOTE: The data set WORK.PERCENTILE47\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.19 seconds

user cpu time 0.11 seconds

system cpu time 0.01 seconds

memory 8884.65k

OS Memory 62224.00k

Timestamp 07/01/2018 11:23:39 AM

Step Count 497 Switch Count 7

Page Faults 0

Page Reclaims 1116

Page Swaps 0

Voluntary Context Switches 211

Involuntary Context Switches 1

Block Input Operations 0

Block Output Operations 680

1347 /\*Above 99.9 percentile values to be deleted i.e.86\*/

1348 data temp\_out;

1349 set temp\_out;

1350 if age1>86 then delete;

1351 run;

NOTE: There were 24743 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT has 24713 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.01 seconds

system cpu time 0.04 seconds

memory 3646.84k

OS Memory 61364.00k

Timestamp 07/01/2018 11:23:39 AM

Step Count 498 Switch Count 7

Page Faults 0

Page Reclaims 529

Page Swaps 0

Voluntary Context Switches 26

Involuntary Context Switches 1

Block Input Operations 0

Block Output Operations 71176

1352 /\*Imputing age1=0 with mean of age1 i.e.31\*/

1353 data temp\_out1;

1354 set temp\_out;

1355 if age1 = 0 then age1 = 31;

1356 run;

NOTE: There were 24713 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT1 has 24713 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.01 seconds

system cpu time 0.04 seconds

memory 3647.46k

OS Memory 61364.00k

Timestamp 07/01/2018 11:23:39 AM

Step Count 499 Switch Count 7

Page Faults 0

Page Reclaims 530

Page Swaps 0

Voluntary Context Switches 27

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 71176

1357 proc univariate data = temp\_out;

1358 var age2;

1359 output out=percentile48\_99 pctlpts=99.9 pctlpre=percentile;

1360 Histogram age2;

1361 run;

NOTE: The data set WORK.PERCENTILE48\_99 has 1 observations and 1 variables.

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time 0.18 seconds

user cpu time 0.11 seconds

system cpu time 0.01 seconds

memory 8762.43k

OS Memory 61968.00k

Timestamp 07/01/2018 11:23:39 AM

Step Count 500 Switch Count 7

Page Faults 0

Page Reclaims 1131

Page Swaps 0

Voluntary Context Switches 214

Involuntary Context Switches 1

Block Input Operations 0

Block Output Operations 680

1362 /\*Above 99.9 percentile values to be deleted i.e.90\*/

1363 data temp\_out;

1364 set temp\_out;

1365 if age2>90 then delete;

1366 run;

NOTE: There were 24713 observations read from the data set WORK.TEMP\_OUT.

NOTE: The data set WORK.TEMP\_OUT has 24692 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.01 seconds

system cpu time 0.03 seconds

memory 3646.21k

OS Memory 61364.00k

Timestamp 07/01/2018 11:23:39 AM

Step Count 501 Switch Count 7

Page Faults 0

Page Reclaims 529

Page Swaps 0

Voluntary Context Switches 27

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 71184

1367 data temp\_out2;

1368 set temp\_out1;

1369 if age2 = 0 then age2 = 21;

1370 run;

NOTE: There were 24713 observations read from the data set WORK.TEMP\_OUT1.

NOTE: The data set WORK.TEMP\_OUT2 has 24713 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.00 seconds

system cpu time 0.03 seconds

memory 3648.15k

OS Memory 61364.00k

Timestamp 07/01/2018 11:23:39 AM

Step Count 502 Switch Count 7

Page Faults 0

Page Reclaims 529

Page Swaps 0

Voluntary Context Switches 24

Involuntary Context Switches 2

Block Input Operations 0

Block Output Operations 71176

1371

1372 proc means n nmiss min max mean data= temp\_out2;

1373 var age1 age2 income;

1374 run;

NOTE: There were 24713 observations read from the data set WORK.TEMP\_OUT2.

NOTE: PROCEDURE MEANS used (Total process time):

real time 0.03 seconds

user cpu time 0.02 seconds

system cpu time 0.02 seconds

memory 7795.12k

OS Memory 64452.00k

Timestamp 07/01/2018 11:23:39 AM

Step Count 503 Switch Count 6

Page Faults 0

Page Reclaims 1538

Page Swaps 0

Voluntary Context Switches 34

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 8

1375

1376

1377 proc contents data = temp\_out2 varnum;

1378 run;

NOTE: PROCEDURE CONTENTS used (Total process time):

real time 0.23 seconds

user cpu time 0.24 seconds

system cpu time 0.00 seconds

memory 2699.65k

OS Memory 60084.00k

Timestamp 07/01/2018 11:23:40 AM

Step Count 504 Switch Count 0

Page Faults 0

Page Reclaims 417

Page Swaps 0

Voluntary Context Switches 0

Involuntary Context Switches 1

Block Input Operations 0

Block Output Operations 136

1379

1380

1381

1382 proc freq data = temp\_dummy;

1383 tables area csa;

1384 run;

NOTE: There were 25674 observations read from the data set WORK.TEMP\_DUMMY.

NOTE: PROCEDURE FREQ used (Total process time):

real time 0.70 seconds

user cpu time 0.70 seconds

system cpu time 0.01 seconds

memory 2237.84k

OS Memory 60084.00k

Timestamp 07/01/2018 11:23:40 AM

Step Count 505 Switch Count 8

Page Faults 0

Page Reclaims 315

Page Swaps 0

Voluntary Context Switches 25

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 680

1385 /\*No missing values in area and csa\*/

1386

1387 /\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

1388 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*End of Data Preparation\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

1389 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

1390

1391

1392

1393

1394

1395

1396

1397

1398

1399

1400

1401

1402 /\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

1403 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Start of Modelling\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

1404 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

1405

1406

1407

1408 /\*Partitioning data into Development and Validation Dataset\*/

1409 data development validation;

1410 set temp\_out2;

1411 if ranuni (100) <0.70 then output development;

1412 else output validation;

1413 run;

NOTE: There were 24713 observations read from the data set WORK.TEMP\_OUT2.

NOTE: The data set WORK.DEVELOPMENT has 17287 observations and 182 variables.

NOTE: The data set WORK.VALIDATION has 7426 observations and 182 variables.

NOTE: DATA statement used (Total process time):

real time 0.04 seconds

user cpu time 0.00 seconds

system cpu time 0.04 seconds

memory 5321.18k

OS Memory 64440.00k

Timestamp 07/01/2018 11:23:40 AM

Step Count 506 Switch Count 9

Page Faults 0

Page Reclaims 879

Page Swaps 0

Voluntary Context Switches 36

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 71448

1414

1415 proc freq data = development;

1416 tables churn;

1417 run;

NOTE: There were 17287 observations read from the data set WORK.DEVELOPMENT.

NOTE: PROCEDURE FREQ used (Total process time):

real time 0.02 seconds

user cpu time 0.02 seconds

system cpu time 0.01 seconds

memory 2134.12k

OS Memory 60084.00k

Timestamp 07/01/2018 11:23:40 AM

Step Count 507 Switch Count 5

Page Faults 0

Page Reclaims 313

Page Swaps 0

Voluntary Context Switches 22

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 264

1418

1419 proc freq data = validation;

1420 tables churn;

1421 run;

NOTE: There were 7426 observations read from the data set WORK.VALIDATION.

NOTE: PROCEDURE FREQ used (Total process time):

real time 0.01 seconds

user cpu time 0.01 seconds

system cpu time 0.01 seconds

memory 2134.31k

OS Memory 60084.00k

Timestamp 07/01/2018 11:23:40 AM

Step Count 508 Switch Count 3

Page Faults 0

Page Reclaims 314

Page Swaps 0

Voluntary Context Switches 17

Involuntary Context Switches 1

Block Input Operations 0

Block Output Operations 264

1422

1423

1424 /\*Running Logistic Regression: Iteration 1\*/

1425 proc logistic data = development descending;

1426 model churn =

1427 actvsubs

1428 adjmou

1429 adjqty

1430 adjrev

1431 age1

1432 age2

1433 area\_atlantic

1434 area\_cali

1435 area\_chicago

1436 area\_city

1437 area\_dallas

1438 area\_dcmvir

1439 area\_gla

1440 area\_houston

1441 area\_la

1442 area\_mdwest

1443 area\_neweng

1444 area\_nfl

1445 area\_nrocky

1446 area\_nyc

1447 area\_ohio

1448 area\_phily

1449 area\_rural

1450 area\_sfl

1451 area\_suburban

1452 area\_swest

1453 area\_tenese

1454 area\_texas

1455 area\_town

1456 area\_unknown

1457 area\_urban

1458 asl\_flag\_no

1459 asl\_flag\_yes

1460 average\_crclscod

1461 avg3mou

1462 avg3qty

1463 avg6mou

1464 avg6qty

1465 avgmou

1466 avgqty

1467 avgrev

1468 bad\_crclscod

1469 best\_crclscod

1470 blck\_dat\_Mean

1471 callwait\_Mean

1472 callwait\_Range

1473 car\_buy\_new

1474 car\_buy\_unknown

1475 cartype\_basic

1476 cartype\_luxury

1477 cartype\_minivan

1478 cartype\_regular

1479 cartype\_SUV

1480 cartype\_truck

1481 cartype\_unknown

1482 cartype\_upper

1483 ccrndmou\_Range

1484 change\_mou

1485 children\_no

1486 children\_unknown

1487 children\_yes

1488 comp\_vce\_Mean

1489 csa\_city1

1490 csa\_city2

1491 csa\_city3

1492 custcare\_Mean

1493 da\_Mean

1494 da\_Range

1495 datovr\_Mean

1496 datovr\_Range

1497 division\_bth

1498 division\_LDD

1499 division\_LTD

1500 division\_unknown

1501 drop\_blk\_Mean

1502 drop\_dat\_Mean

1503 drop\_vce\_Mean

1504 drop\_vce\_Range

1505 dsize\_1

1506 dsize\_100

1507 dsize\_10to19

1508 dsize\_2

1509 dsize\_20to29

1510 dsize\_3

1511 dsize\_30to39

1512 dsize\_4

1513 dsize\_40to49

1514 dsize\_5

1515 dsize\_50to99

1516 dsize\_6

1517 dsize\_7

1518 dsize\_8

1519 dsize\_9

1520 dsize\_unknown

1521 dwell\_multiple

1522 dwell\_single

1523 dwell\_unknown

1524 eqpdays

1525 ethnic\_afro\_amer

1526 ethnic\_arab

1527 ethnic\_asian

1528 ethnic\_asian\_nor

1529 ethnic\_french

1530 ethnic\_german

1531 ethnic\_hispanic

1532 ethnic\_italian

1533 ethnic\_jewish

1534 ethnic\_misc

1535 ethnic\_north\_euro

1536 ethnic\_polynesia

1537 ethnic\_scot\_iris

1538 ethnic\_south\_euro

1539 ethnic\_unknown

1540 forgntvl

1541 good\_crclscod

1542 handset\_na

1543 handset\_new

1544 handset\_refurb

1545 handset\_unkw

1546 handset\_wc

1547 handset\_wcmb

1548 hnd\_price

1549 income

1550 iwylis\_vce\_Mean

1551 mailorder\_buyer

1552 mailorder\_unknown

1553 mailresp\_unknown

1554 mailresp\_yes

1555 models

1556 months

1557 mou\_Mean

1558 mou\_opkv\_Range

1559 mou\_pead\_Mean

1560 mou\_Range

1561 mtrcycle

1562 numcars\_1

1563 numcars\_2

1564 numcars\_3

1565 numcars\_unknown

1566 occu\_admin

1567 occu\_bc

1568 occu\_farmer

1569 occu\_homemaker

1570 occu\_military

1571 occu\_religious

1572 occu\_retires

1573 occu\_sales

1574 occu\_selfemp

1575 occu\_student

1576 occu\_technical

1577 occu\_wc

1578 opk\_dat\_Mean

1579 ovrmou\_Mean

1580 ovrrev\_Mean

1581 owylis\_vce\_Range

1582 plcd\_vce\_Mean

1583 proptype\_a

1584 proptype\_b

1585 proptype\_d

1586 proptype\_e

1587 proptype\_g

1588 proptype\_m

1589 proptype\_unknown

1590 recv\_sms\_Mean

1591 rev\_Mean

1592 rev\_Range

1593 roam\_Mean

1594 status\_infermarried

1595 status\_infersingle

1596 status\_married

1597 status\_single

1598 status\_unknown

1599 totcalls

1600 totmrc\_Mean

1601 totrev

1602 truck

1603 uniqsubs

1604 worst\_crclscod

1605 ;

1606 output out = churn\_model1 predicted = pred\_prob;

1607 run;

NOTE: PROC LOGISTIC is modeling the probability that churn='1'.

NOTE: Convergence criterion (GCONV=1E-8) satisfied.

NOTE: There were 17287 observations read from the data set WORK.DEVELOPMENT.

NOTE: The data set WORK.CHURN\_MODEL1 has 17287 observations and 184 variables.

NOTE: PROCEDURE LOGISTIC used (Total process time):

real time 2.13 seconds

user cpu time 2.06 seconds

system cpu time 0.07 seconds

memory 32772.96k

OS Memory 90448.00k

Timestamp 07/01/2018 11:23:43 AM

Step Count 509 Switch Count 17

Page Faults 0

Page Reclaims 7556

Page Swaps 0

Voluntary Context Switches 52

Involuntary Context Switches 6

Block Input Operations 0

Block Output Operations 98880

1608

1609 /\*iteration2\*/

1610 proc logistic data = development descending;

1611 model churn =

1612 actvsubs

1613 age1

1614 area\_rural

1615 area\_town

1616 asl\_flag\_yes

1617 best\_crclscod

1618 avgmou

1619 mou\_mean

1620 change\_mou

1621 custcare\_Mean

1622 division\_bth

1623 division\_LDD

1624 drop\_blk\_Mean

1625 dsize\_4

1626 dsize\_40to49

1627 eqpdays

1628 handset\_new

1629 hnd\_price

1630 mailorder\_buyer

1631 mailresp\_unknown

1632 models

1633 months

1634 mou\_Range

1635 opk\_dat\_Mean

1636 ovrmou\_Mean

1637 status\_single

1638 uniqsubs/ctable lackfit rsquare

1639 ;

1640 output out = churn\_model2 predicted = pred\_prob;

1641 run;

NOTE: PROC LOGISTIC is modeling the probability that churn='1'.

NOTE: Convergence criterion (GCONV=1E-8) satisfied.

NOTE: There were 17287 observations read from the data set WORK.DEVELOPMENT.

NOTE: The data set WORK.CHURN\_MODEL2 has 17287 observations and 184 variables.

NOTE: PROCEDURE LOGISTIC used (Total process time):

real time 0.41 seconds

user cpu time 0.38 seconds

system cpu time 0.04 seconds

memory 12846.78k

OS Memory 71848.00k

Timestamp 07/01/2018 11:23:43 AM

Step Count 510 Switch Count 17

Page Faults 0

Page Reclaims 2880

Page Swaps 0

Voluntary Context Switches 54

Involuntary Context Switches 4

Block Input Operations 0

Block Output Operations 57792

1642

1643

1644

1645 OPTIONS NONOTES NOSTIMER NOSOURCE NOSYNTAXCHECK;

1657