

```
1  *-----
   -*
2  User:                grace
3  Date:                January 07, 2024
4  Time:                19:10:31
5  *-----
   -*
6  * Training Output
7  *-----
   -*
8
9
10
11
12 Variable Summary
13
14           Measurement      Frequency
15 Role           Level        Count
16
17 ASSESS         NOMINAL        1
18 ID             INTERVAL        1
19 ID             UNARY           1
20 INPUT          INTERVAL       11
21 INPUT          NOMINAL         5
22 INPUT          ORDINAL         2
23 TARGET         BINARY          1
24
25
26
27
28 Model Events
29
30                                     Number
31           Measurement             of
32 Target    Event      Level      Levels      Order      La
   bel
```

```

33
34 Churn          1          BINARY          2          Descending
35
36
37
38
39 Predicted and decision variables
40
41 Type           Variable      Label
42
43 TARGET         Churn
44 PREDICTED      P_Churn1      Predicted: Churn=1
45 RESIDUAL       R_Churn1      Residual: Churn=1
46 PREDICTED      P_Churn0      Predicted: Churn=0
47 RESIDUAL       R_Churn0      Residual: Churn=0
48 FROM          F_Churn       From: Churn
49 INTO          I_Churn       Into: Churn
50
51
52 *-----
   -*
53 * Score Output
54 *-----
   -*
55
56
57
58 Variable Importance
59
60 Obs    NAME                                LABEL
                                NRULES    IMPORTANCE    VIMPORTANCE
                                RATIO
61
62   1    IMP_Tenure                                Imputed Tenure
                                548        1.00000        1.00000
                                1.00000

```

63	2	CashbackAmount	763	0.64216	0.47981
					0.74718
64	3	NumberOfAddress	430	0.47759	0.36549
					0.76529
65	4	IMP_WarehouseToHome			Imputed WarehouseT
		oHome	567	0.45264	0.40484
					0.89440
66	5	Complain	162	0.41487	0.52172
					1.25756
67	6	SatisfactionScore	246	0.41345	0.42656
					1.03169
68	7	IMP_OrderAmountHikeFromlastYear			Imputed OrderAmoun
		tHikeFromlastYear	390	0.40015	0.37262
					0.93120
69	8	IMP_DaySinceLastOrder			Imputed DaySinceLa
		stOrder	321	0.37355	0.29594
					0.79223
70	9	NumberOfDeviceRegistered	267	0.33014	0.28254
					0.85583
71	10	PreferredPaymentMode	197	0.32362	0.24448
					0.75547
72	11	MaritalStatus	170	0.29483	0.20550
					0.69699
73	12	PreferedOrderCat	130	0.28653	0.28308
					0.98795
74	13	IMP_CouponUsed			Imputed CouponUsed
			216	0.28046	0.26069
					0.92953

75	14	IMP_OrderCount		Imputed OrderCount
		193	0.26754	0.21045
		0.78660		
76	15	CityTier		
		95	0.25755	0.24446
		0.94918		
77	16	PreferredLoginDevice		
		56	0.18415	0.18806
		1.02125		
78	17	MembershipLevel		
		93	0.18365	0.14417
		0.78503		
79	18	IMP_HourSpendOnApp		Imputed HourSpendO
		nApp	89	0.09996
		0.56413		
80				
81				
82	*-----			
	-*			
83	* Report Output			
84	*-----			
	-*			
85				
86				
87				
88				
89	Fit Statistics			
90				
91	Target=Churn Target Label=' '			
92				
93	Fit			
94	Statistics	Statistics Label	Train	V
	alidation			
95				
96	_NOBS_	Sum of Frequencies		1342.00
	577.00			

```

97  _SUMW_      Sum of Case Weights Times Freq    2684.00
1154.00
98  _MISC_      Misclassification Rate            0.00
0.09
99  _MAX_       Maximum Absolute Error            0.38
0.99
100 _SSE_       Sum of Squared Errors              9.01
86.08
101 _ASE_       Average Squared Error              0.00
0.07
102 _RASE_      Root Average Squared Error              0.06
0.27
103 _DIV_       Divisor for ASE                2684.00
1154.00
104 _DFT_       Total Degrees of Freedom            1342.00
.
105
106
107
108
109 Classification Table
110
111 Data Role=TRAIN Target Variable=Churn Target Label=' '
112
113              Target      Outcome      Frequency
      Total
114 Target      Outcome      Percentage      Percentage      Count
      Percentage
115
116  0            0            100            100            679
      50.5961
117  1            1            100            100            663
      49.4039
118
119
120 Data Role=VALIDATE Target Variable=Churn Target Label=' '

```

```

121
122               Target      Outcome      Frequency
      Total
123 Target      Outcome      Percentage      Percentage      Count
      Percentage
124
125      0              0          91.1565          91.7808          268
      46.4471
126      1              0          8.8435          9.1228          26
      4.5061
127      0              1          8.4806          8.2192          24
      4.1594
128      1              1          91.5194          90.8772          259
      44.8873
129
130
131
132
133 Event Classification Table
134
135 Data Role=TRAIN Target=Churn Target Label=' '
136
137      False      True      False      True
138 Negative      Negative      Positive      Positive
139
140      .              679      .              663
141
142
143 Data Role=VALIDATE Target=Churn Target Label=' '
144
145      False      True      False      True
146 Negative      Negative      Positive      Positive
147
148      26              268          24              259
149
150

```

151
 152
 153 Assessment Score Rankings
 154
 155 Data Role=TRAIN Target Variable=Churn Target Label=' '
 156
 157

				Mean		
	Cumulative	Number of	Posterior	Cumulative	%	Cum
	ulative	Gain	Lift	Lift	Response	% R
159	Depth	Observations	Probability			
	esponse					
160						
161	5	102.413	2.02413	2.02413	100.000	1
	00.000	68		0.99356		
162	10	102.413	2.02413	2.02413	100.000	1
	00.000	67		0.99128		
163	15	102.413	2.02413	2.02413	100.000	1
	00.000	67		0.98902		
164	20	102.413	2.02413	2.02413	100.000	1
	00.000	67		0.98598		
165	25	102.413	2.02413	2.02413	100.000	1
	00.000	67		0.98171		
166	30	102.413	2.02413	2.02413	100.000	1
	00.000	67		0.97690		
167	35	102.413	2.02413	2.02413	100.000	1
	00.000	67		0.96875		
168	40	102.413	2.02413	2.02413	100.000	1
	00.000	67		0.95320		
169	45	102.413	2.02413	2.02413	100.000	1
	00.000	67		0.92851		
170	50	100.000	1.78245	2.00000	88.060	
	98.808	67		0.77648		
171	55	81.597	0.00000	1.81597	0.000	
	89.716	68		0.11421		
172	60	66.501	0.00000	1.66501	0.000	

	82.258	67		0.05871	
173	65	53.723	0.00000	1.53723	0.000
	75.945	67		0.03873	
174	70	42.766	0.00000	1.42766	0.000
	70.532	67		0.03076	
175	75	33.267	0.00000	1.33267	0.000
	65.839	67		0.02523	
176	80	24.953	0.00000	1.24953	0.000
	61.732	67		0.02034	
177	85	17.616	0.00000	1.17616	0.000
	58.107	67		0.01649	
178	90	11.093	0.00000	1.11093	0.000
	54.884	67		0.01372	
179	95	5.255	0.00000	1.05255	0.000
	52.000	67		0.01091	
180	100	0.000	0.00000	1.00000	0.000
	49.404	67		0.00764	

181

182

183 Data Role=VALIDATE Target Variable=Churn Target Label=' '

184

185

				Mean		
				Cumulative	%	Cum
	ulative	Number of	Posterior			
187	Depth	Gain Lift	Lift		Response	% R
	esponse	Observations	Probability			
188						
189	5	102.456	2.02456	2.02456	100.000	1
	00.000	29		0.99353		
190	10	102.456	2.02456	2.02456	100.000	1
	00.000	29		0.98957		
191	15	95.475	1.81512	1.95475	89.655	
	96.552	29		0.98557		
192	20	90.239	1.74531	1.90239	86.207	
	93.966	29		0.97886		

193	25	89.890	1.88494	1.89890	93.103
	93.793	29		0.97130	
194	30	90.821	1.95475	1.90821	96.552
	94.253	29		0.95781	
195	35	90.429	1.87995	1.90429	92.857
	94.059	28		0.93441	
196	40	87.557	1.67550	1.87557	82.759
	92.641	29		0.87972	
197	45	87.661	1.88494	1.87661	93.103
	92.692	29		0.78809	
198	50	82.140	1.32644	1.82140	65.517
	89.965	29		0.57598	
199	55	72.533	0.76794	1.72533	37.931
	85.220	29		0.35219	
200	60	61.031	0.34906	1.61031	17.241
	79.539	29		0.20624	
201	65	51.842	0.41887	1.51842	20.690
	75.000	29		0.12107	
202	70	42.321	0.14461	1.42321	7.143
	70.297	28		0.06939	
203	75	33.256	0.06981	1.33256	3.448
	65.820	29		0.04683	
204	80	24.892	0.00000	1.24892	0.000
	61.688	29		0.03124	
205	85	17.515	0.00000	1.17515	0.000
	58.045	29		0.02293	
206	90	10.962	0.00000	1.10962	0.000
	54.808	29		0.01770	
207	95	5.100	0.00000	1.05100	0.000
	51.913	29		0.01290	
208	100	0.000	0.00000	1.00000	0.000
	49.393	28		0.00786	
209					
210					
211					
212					

213 Assessment Score Distribution

214

215 Data Role=TRAIN Target Variable=Churn Target Label=' '

216

217	Posterior	Number		Mean	
218	Probability	of	Number of	Posterior	
219	Range	Events	Nonevents	Probability	Percent
					age

220

221	0.95-1.00	517	0	0.98134	38.52
	46				

222	0.90-0.95	95	0	0.93059	7.07
	90				

223	0.85-0.90	28	0	0.87783	2.08
	64				

224	0.80-0.85	13	0	0.82572	0.96
	87				

225	0.75-0.80	4	0	0.76917	0.29
	81				

226	0.70-0.75	2	0	0.72829	0.14
	90				

227	0.65-0.70	2	0	0.68768	0.14
	90				

228	0.60-0.65	2	0	0.63986	0.14
	90				

229	0.35-0.40	0	1	0.38412	0.07
	45				

230	0.30-0.35	0	3	0.34451	0.22
	35				

231	0.20-0.25	0	3	0.22361	0.22
	35				

232	0.15-0.20	0	11	0.16535	0.81
	97				

233	0.10-0.15	0	27	0.12344	2.01
	19				

234	0.05-0.10	0	84	0.07231	6.25
-----	-----------	---	----	---------	------

```

93
235  0.00-0.05          0          550          0.02116          40.98
36
236
237
238 Data Role=VALIDATE Target Variable=Churn Target Label=' '
239
240 Posterior          Number          Mean
241 Probability          of          Number of          Posterior
242   Range          Events          Nonevents          Probability          Percent
    age
243
244  0.95-1.00          164          10          0.97944          30.15
60
245  0.90-0.95          33          2          0.92955          6.06
59
246  0.85-0.90          16          4          0.87273          3.46
62
247  0.80-0.85          11          2          0.82878          2.25
30
248  0.75-0.80          13          1          0.77777          2.42
63
249  0.70-0.75          5          0          0.71872          0.86
66
250  0.65-0.70          3          2          0.67829          0.86
66
251  0.60-0.65          6          1          0.62071          1.21
32
252  0.55-0.60          3          0          0.57810          0.51
99
253  0.50-0.55          5          2          0.52190          1.21
32
254  0.45-0.50          2          6          0.47089          1.38
65
255  0.40-0.45          0          5          0.42056          0.86
66

```

256	0.35-0.40	4	4	0.38123	1.38
	65				
257	0.30-0.35	4	2	0.32683	1.03
	99				
258	0.25-0.30	3	8	0.26878	1.90
	64				
259	0.20-0.25	3	10	0.22560	2.25
	30				
260	0.15-0.20	1	13	0.17427	2.42
	63				
261	0.10-0.15	6	17	0.12524	3.98
	61				
262	0.05-0.10	3	40	0.06858	7.45
	23				
263	0.00-0.05	0	163	0.02153	28.24
	96				