> library(readr)

> affairs <- read\_csv("C:/Users/Admin/Desktop/Assignments/Logestic\_Regression/affairs.csv")

> View(affairs)

> attach(affairs)

> logit<- glm(naffairs~factor(kids)+factor(vryunhap)+factor(unhap)+factor(avgmarr)+factor(hapavg)+factor(antirel)+factor(notrel)+factor(slghtrel)+factor(smerel)+factor(vryrel)+factor(yrsmarr1)+factor(yrsmarr2)+factor(yrsmarr3)+factor(yrsmarr4)+factor(yrsmarr5)+factor(yrsmarr6),family = poisson, data = affairs)

> summary(affairs)

naffairs kids vryunhap unhap

Min. : 0.000 Min. :0.0000 Min. :0.00000 Min. :0.0000

1st Qu.: 0.000 1st Qu.:0.0000 1st Qu.:0.00000 1st Qu.:0.0000

Median : 0.000 Median :1.0000 Median :0.00000 Median :0.0000

Mean : 1.456 Mean :0.7155 Mean :0.02662 Mean :0.1098

3rd Qu.: 0.000 3rd Qu.:1.0000 3rd Qu.:0.00000 3rd Qu.:0.0000

Max. :12.000 Max. :1.0000 Max. :1.00000 Max. :1.0000

avgmarr hapavg vryhap antirel

Min. :0.0000 Min. :0.0000 Min. :0.000 Min. :0.00000

1st Qu.:0.0000 1st Qu.:0.0000 1st Qu.:0.000 1st Qu.:0.00000

Median :0.0000 Median :0.0000 Median :0.000 Median :0.00000

Mean :0.1547 Mean :0.3228 Mean :0.386 Mean :0.07987

3rd Qu.:0.0000 3rd Qu.:1.0000 3rd Qu.:1.000 3rd Qu.:0.00000

Max. :1.0000 Max. :1.0000 Max. :1.000 Max. :1.00000

notrel slghtrel smerel vryrel

Min. :0.0000 Min. :0.0000 Min. :0.0000 Min. :0.0000

1st Qu.:0.0000 1st Qu.:0.0000 1st Qu.:0.0000 1st Qu.:0.0000

Median :0.0000 Median :0.0000 Median :0.0000 Median :0.0000

Mean :0.2729 Mean :0.2146 Mean :0.3161 Mean :0.1165

3rd Qu.:1.0000 3rd Qu.:0.0000 3rd Qu.:1.0000 3rd Qu.:0.0000

Max. :1.0000 Max. :1.0000 Max. :1.0000 Max. :1.0000

yrsmarr1 yrsmarr2 yrsmarr3 yrsmarr4

Min. :0.00000 Min. :0.0000 Min. :0.0000 Min. :0.0000

1st Qu.:0.00000 1st Qu.:0.0000 1st Qu.:0.0000 1st Qu.:0.0000

Median :0.00000 Median :0.0000 Median :0.0000 Median :0.0000

Mean :0.08652 Mean :0.1464 Mean :0.1747 Mean :0.1364

3rd Qu.:0.00000 3rd Qu.:0.0000 3rd Qu.:0.0000 3rd Qu.:0.0000

Max. :1.00000 Max. :1.0000 Max. :1.0000 Max. :1.0000

yrsmarr5 yrsmarr6

Min. :0.0000 Min. :0.0000

1st Qu.:0.0000 1st Qu.:0.0000

Median :0.0000 Median :0.0000

Mean :0.1165 Mean :0.3394

3rd Qu.:0.0000 3rd Qu.:1.0000

Max. :1.0000 Max. :1.0000

> summary(logit)

Call:

glm(formula = naffairs ~ factor(kids) + factor(vryunhap) + factor(unhap) +

factor(avgmarr) + factor(hapavg) + factor(antirel) + factor(notrel) +

factor(slghtrel) + factor(smerel) + factor(vryrel) + factor(yrsmarr1) +

factor(yrsmarr2) + factor(yrsmarr3) + factor(yrsmarr4) +

factor(yrsmarr5) + factor(yrsmarr6), family = poisson, data = affairs)

Deviance Residuals:

Min 1Q Median 3Q Max

-3.6265 -1.4879 -1.1551 -0.6214 7.8015

Coefficients: (2 not defined because of singularities)

Estimate Std. Error z value Pr(>|z|)

(Intercept) -0.141500 0.177988 -0.795 0.426616

factor(kids)1 -0.241704 0.107164 -2.255 0.024105 \*

factor(vryunhap)1 1.239144 0.154212 8.035 9.33e-16 \*\*\*

factor(unhap)1 1.423567 0.104864 13.575 < 2e-16 \*\*\*

factor(avgmarr)1 0.493290 0.118127 4.176 2.97e-05 \*\*\*

factor(hapavg)1 0.356812 0.102106 3.495 0.000475 \*\*\*

factor(antirel)1 1.363284 0.158864 8.581 < 2e-16 \*\*\*

factor(notrel)1 0.705591 0.144262 4.891 1.00e-06 \*\*\*

factor(slghtrel)1 0.843051 0.143272 5.884 4.00e-09 \*\*\*

factor(smerel)1 -0.008489 0.150031 -0.057 0.954877

factor(vryrel)1 NA NA NA NA

factor(yrsmarr1)1 -1.343445 0.217451 -6.178 6.49e-10 \*\*\*

factor(yrsmarr2)1 -1.601541 0.185329 -8.642 < 2e-16 \*\*\*

factor(yrsmarr3)1 -0.727202 0.114107 -6.373 1.85e-10 \*\*\*

factor(yrsmarr4)1 -0.389992 0.101836 -3.830 0.000128 \*\*\*

factor(yrsmarr5)1 -0.014319 0.103516 -0.138 0.889983

factor(yrsmarr6)1 NA NA NA NA

---

Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1

(Dispersion parameter for poisson family taken to be 1)

Null deviance: 2925.5 on 600 degrees of freedom

Residual deviance: 2303.2 on 586 degrees of freedom

AIC: 2827.2

Number of Fisher Scoring iterations: 7

**After removing factor(smerel)**

> logit1<- glm(naffairs~factor(kids)+factor(vryunhap)+factor(unhap)+factor(avgmarr)+factor(hapavg)+factor(antirel)+factor(notrel)+factor(slghtrel)+factor(vryrel)+factor(yrsmarr1)+factor(yrsmarr2)+factor(yrsmarr3)+factor(yrsmarr4)+factor(yrsmarr5)+factor(yrsmarr6),family = poisson, data = affairs)

> summary(logit1)

Call:

glm(formula = naffairs ~ factor(kids) + factor(vryunhap) + factor(unhap) +

factor(avgmarr) + factor(hapavg) + factor(antirel) + factor(notrel) +

factor(slghtrel) + factor(vryrel) + factor(yrsmarr1) + factor(yrsmarr2) +

factor(yrsmarr3) + factor(yrsmarr4) + factor(yrsmarr5) +

factor(yrsmarr6), family = poisson, data = affairs)

Deviance Residuals:

Min 1Q Median 3Q Max

-3.6265 -1.4879 -1.1551 -0.6214 7.8015

Coefficients: (1 not defined because of singularities)

Estimate Std. Error z value Pr(>|z|)

(Intercept) -0.149989 0.145432 -1.031 0.302386

factor(kids)1 -0.241704 0.107164 -2.255 0.024105 \*

factor(vryunhap)1 1.239144 0.154212 8.035 9.33e-16 \*\*\*

factor(unhap)1 1.423567 0.104864 13.575 < 2e-16 \*\*\*

factor(avgmarr)1 0.493290 0.118127 4.176 2.97e-05 \*\*\*

factor(hapavg)1 0.356812 0.102106 3.495 0.000475 \*\*\*

factor(antirel)1 1.371773 0.121205 11.318 < 2e-16 \*\*\*

factor(notrel)1 0.714080 0.101547 7.032 2.04e-12 \*\*\*

factor(slghtrel)1 0.851540 0.101225 8.412 < 2e-16 \*\*\*

factor(vryrel)1 0.008489 0.150031 0.057 0.954877

factor(yrsmarr1)1 -1.343445 0.217451 -6.178 6.49e-10 \*\*\*

factor(yrsmarr2)1 -1.601541 0.185329 -8.642 < 2e-16 \*\*\*

factor(yrsmarr3)1 -0.727202 0.114107 -6.373 1.85e-10 \*\*\*

factor(yrsmarr4)1 -0.389992 0.101836 -3.830 0.000128 \*\*\*

factor(yrsmarr5)1 -0.014319 0.103516 -0.138 0.889983

factor(yrsmarr6)1 NA NA NA NA

---

Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1

(Dispersion parameter for poisson family taken to be 1)

Null deviance: 2925.5 on 600 degrees of freedom

Residual deviance: 2303.2 on 586 degrees of freedom

AIC: 2827.2

Number of Fisher Scoring iterations: 7

**After removing factor(vryrel)**

> logit2<- glm(naffairs~factor(kids)+factor(vryunhap)+factor(unhap)+factor(avgmarr)+factor(hapavg)+factor(antirel)+factor(notrel)+factor(slghtrel)+factor(yrsmarr1)+factor(yrsmarr2)+factor(yrsmarr3)+factor(yrsmarr4)+factor(yrsmarr5)+factor(yrsmarr6),family = poisson, data = affairs)

> summary(logit2)

Call:

glm(formula = naffairs ~ factor(kids) + factor(vryunhap) + factor(unhap) +

factor(avgmarr) + factor(hapavg) + factor(antirel) + factor(notrel) +

factor(slghtrel) + factor(yrsmarr1) + factor(yrsmarr2) +

factor(yrsmarr3) + factor(yrsmarr4) + factor(yrsmarr5) +

factor(yrsmarr6), family = poisson, data = affairs)

Deviance Residuals:

Min 1Q Median 3Q Max

-3.6268 -1.4897 -1.1551 -0.6209 7.8008

Coefficients: (1 not defined because of singularities)

Estimate Std. Error z value Pr(>|z|)

(Intercept) -0.14774 0.13983 -1.057 0.290736

factor(kids)1 -0.24142 0.10704 -2.255 0.024109 \*

factor(vryunhap)1 1.23914 0.15421 8.035 9.34e-16 \*\*\*

factor(unhap)1 1.42345 0.10484 13.577 < 2e-16 \*\*\*

factor(avgmarr)1 0.49316 0.11811 4.176 2.97e-05 \*\*\*

factor(hapavg)1 0.35670 0.10209 3.494 0.000476 \*\*\*

factor(antirel)1 1.36952 0.11446 11.965 < 2e-16 \*\*\*

factor(notrel)1 0.71182 0.09332 7.628 2.39e-14 \*\*\*

factor(slghtrel)1 0.84924 0.09266 9.165 < 2e-16 \*\*\*

factor(yrsmarr1)1 -1.34323 0.21741 -6.178 6.48e-10 \*\*\*

factor(yrsmarr2)1 -1.60144 0.18531 -8.642 < 2e-16 \*\*\*

factor(yrsmarr3)1 -0.72743 0.11403 -6.379 1.78e-10 \*\*\*

factor(yrsmarr4)1 -0.39046 0.10149 -3.847 0.000119 \*\*\*

factor(yrsmarr5)1 -0.01445 0.10349 -0.140 0.888969

factor(yrsmarr6)1 NA NA NA NA

---

Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1

(Dispersion parameter for poisson family taken to be 1)

Null deviance: 2925.5 on 600 degrees of freedom

Residual deviance: 2303.2 on 587 degrees of freedom

AIC: 2825.2

Number of Fisher Scoring iterations: 7

**After removing factor(yrsmarr5)**

> logit3<- glm(naffairs~factor(kids)+factor(vryunhap)+factor(unhap)+factor(avgmarr)+factor(hapavg)+factor(antirel)+factor(notrel)+factor(slghtrel)+factor(yrsmarr1)+factor(yrsmarr2)+factor(yrsmarr3)+factor(yrsmarr4)+factor(yrsmarr6),family = poisson, data = affairs)

> summary(logit3)

Call:

glm(formula = naffairs ~ factor(kids) + factor(vryunhap) + factor(unhap) +

factor(avgmarr) + factor(hapavg) + factor(antirel) + factor(notrel) +

factor(slghtrel) + factor(yrsmarr1) + factor(yrsmarr2) +

factor(yrsmarr3) + factor(yrsmarr4) + factor(yrsmarr6), family = poisson,

data = affairs)

Deviance Residuals:

Min 1Q Median 3Q Max

-3.6268 -1.4897 -1.1551 -0.6209 7.8008

Coefficients:

Estimate Std. Error z value Pr(>|z|)

(Intercept) -0.16218 0.15177 -1.069 0.285226

factor(kids)1 -0.24142 0.10704 -2.255 0.024109 \*

factor(vryunhap)1 1.23914 0.15421 8.035 9.34e-16 \*\*\*

factor(unhap)1 1.42345 0.10484 13.577 < 2e-16 \*\*\*

factor(avgmarr)1 0.49316 0.11811 4.176 2.97e-05 \*\*\*

factor(hapavg)1 0.35670 0.10209 3.494 0.000476 \*\*\*

factor(antirel)1 1.36952 0.11446 11.965 < 2e-16 \*\*\*

factor(notrel)1 0.71182 0.09332 7.628 2.39e-14 \*\*\*

factor(slghtrel)1 0.84924 0.09266 9.165 < 2e-16 \*\*\*

factor(yrsmarr1)1 -1.32879 0.22250 -5.972 2.34e-09 \*\*\*

factor(yrsmarr2)1 -1.58699 0.19264 -8.238 < 2e-16 \*\*\*

factor(yrsmarr3)1 -0.71299 0.13144 -5.425 5.81e-08 \*\*\*

factor(yrsmarr4)1 -0.37601 0.12497 -3.009 0.002621 \*\*

factor(yrsmarr6)1 0.01445 0.10349 0.140 0.888969

---

Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1

(Dispersion parameter for poisson family taken to be 1)

Null deviance: 2925.5 on 600 degrees of freedom

Residual deviance: 2303.2 on 587 degrees of freedom

AIC: 2825.2

Number of Fisher Scoring iterations: 7

**After removing factor(yrsmarr6)**

> logit4<- glm(naffairs~factor(kids)+factor(vryunhap)+factor(unhap)+factor(avgmarr)+factor(hapavg)+factor(antirel)+factor(notrel)+factor(slghtrel)+factor(yrsmarr1)+factor(yrsmarr2)+factor(yrsmarr3)+factor(yrsmarr4),family = poisson, data = affairs)

> summary(logit4)

Call:

glm(formula = naffairs ~ factor(kids) + factor(vryunhap) + factor(unhap) +

factor(avgmarr) + factor(hapavg) + factor(antirel) + factor(notrel) +

factor(slghtrel) + factor(yrsmarr1) + factor(yrsmarr2) +

factor(yrsmarr3) + factor(yrsmarr4), family = poisson, data = affairs)

Deviance Residuals:

Min 1Q Median 3Q Max

-3.6225 -1.4873 -1.1546 -0.6207 7.7999

Coefficients:

Estimate Std. Error z value Pr(>|z|)

(Intercept) -0.15263 0.13538 -1.127 0.259544

factor(kids)1 -0.23955 0.10616 -2.256 0.024044 \*

factor(vryunhap)1 1.24262 0.15219 8.165 3.22e-16 \*\*\*

factor(unhap)1 1.42468 0.10447 13.637 < 2e-16 \*\*\*

factor(avgmarr)1 0.49293 0.11809 4.174 2.99e-05 \*\*\*

factor(hapavg)1 0.35671 0.10208 3.495 0.000475 \*\*\*

factor(antirel)1 1.36856 0.11425 11.978 < 2e-16 \*\*\*

factor(notrel)1 0.70970 0.09209 7.707 1.29e-14 \*\*\*

factor(slghtrel)1 0.84868 0.09257 9.168 < 2e-16 \*\*\*

factor(yrsmarr1)1 -1.33750 0.21349 -6.265 3.73e-10 \*\*\*

factor(yrsmarr2)1 -1.59606 0.18126 -8.805 < 2e-16 \*\*\*

factor(yrsmarr3)1 -0.72307 0.10968 -6.592 4.33e-11 \*\*\*

factor(yrsmarr4)1 -0.38681 0.09809 -3.944 8.03e-05 \*\*\*

---

Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1

(Dispersion parameter for poisson family taken to be 1)

Null deviance: 2925.5 on 600 degrees of freedom

Residual deviance: 2303.2 on 588 degrees of freedom

AIC: 2823.2

Number of Fisher Scoring iterations: 7

exp(coef(logit4))

(Intercept) factor(kids)1 factor(vryunhap)1 factor(unhap)1

0.8584440 0.7869809 3.4646825 4.1565109

factor(avgmarr)1 factor(hapavg)1 factor(antirel)1 factor(notrel)1

1.6371048 1.4286249 3.9296918 2.0333865

factor(slghtrel)1 factor(yrsmarr1)1 factor(yrsmarr2)1 factor(yrsmarr3)1

2.3365573 0.2625020 0.2026926 0.4852586

factor(yrsmarr4)1

0.6792225

> prob<- predict(logit4,type=c("response"),affairs)

> prob

1 2 3 4 5 6 7

2.8655409 0.5951184 0.5808238 3.7927381 0.7659948 0.6755790 0.7501376

8 9 10 11 12 13 14

0.3538097 2.8080516 0.7501376 1.9625209 2.8080516 0.1740002 5.7098541

15 16 17 18 19 20 21

6.5611735 0.4683468 0.9651490 0.2253432 0.2784415 0.5054613 0.5951184

22 23 24 25 26 27 28

2.6548173 2.2489125 0.7522101 0.3538097 1.3737132 2.8080516 0.3538097

29 30 31 32 33 34 35

0.5054613 0.3538097 0.9651490 1.9625209 1.5785291 0.9523301 2.8080516

36 37 38 39 40 41 42

0.3538097 0.5830744 0.9651490 0.7659948 2.8080516 1.0943192 2.2551260

43 44 45 46 47 48 49

1.1059936 0.4065615 0.3219310 0.9651490 1.8404586 0.2848566 2.3406668

50 51 52 53 54 55 56

5.7098541 6.5611735 1.6369811 2.2551260 2.2489125 0.4165673 0.9733334

57 58 59 60 61 62 63

0.5381117 0.5265274 0.6755790 0.6755790 0.6755790 1.1059936 0.3219310

64 65 66 67 68 69 70

2.3095786 0.7512157 0.9733334 1.0943192 0.6555509 0.4588685 1.9625209

71 72 73 74 75 76 77

0.1369348 1.9625209 0.4570973 1.9072917 0.2253432 1.3329883 0.3278305

78 79 80 81 82 83 84

0.9651490 1.6369811 0.9651490 1.1059936 2.3406668 1.4706138 0.5951184

85 86 87 88 89 90 91

0.1956285 0.6755790 0.3219310 0.9651490 2.8080516 2.2551260 0.4582099

92 93 94 95 96 97 98

0.8470423 1.7552586 0.9651490 0.8329947 2.7707556 1.3737132 0.2253432

99 100 101 102 103 104 105

0.6755790 0.9651490 1.5785291 0.1740002 0.5054613 1.3329883 1.9625209

106 107 108 109 110 111 112

0.9733334 0.6755790 0.4582099 1.1059936 2.6548173 0.4588685 0.3199561

113 114 115 116 117 118 119

5.5226424 1.3737132 0.7659948 0.4065615 5.7098541 0.3199561 0.6755790

120 121 122 123 124 125 126

0.6546100 0.6819643 0.1369348 1.9625209 4.3462140 1.2650894 2.2489125

127 128 129 130 131 132 133

0.6755790 1.6898772 0.3199561 2.2551260 0.9651490 2.2489125 0.9651490

134 135 136 137 138 139 140

1.5785291 1.1059936 1.2650894 0.6755790 5.4691022 3.7927381 1.5785291

141 142 143 144 145 146 147

0.6755790 0.6755790 1.9625209 1.3905283 0.2253432 7.4950686 0.6755790

148 149 150 151 152 153 154

0.7659948 0.6755790 2.3406668 1.3905283 0.9651490 0.4683468 0.6555509

155 156 157 158 159 160 161

0.9651490 2.5842175 0.5054613 0.4588685 0.6755790 0.4588685 0.1740002

162 163 164 165 166 167 168

0.9651490 0.5919750 1.9463398 0.8584440 2.8080516 1.2263944 0.2253432

169 170 171 172 173 174 175

0.6555509 0.9330569 0.9651490 0.9651490 1.1059936 3.8782612 0.4065615

176 177 178 179 180 181 182

1.9625209 0.6755790 0.4582099 0.1740002 0.3538097 0.9523301 0.3538097

183 184 185 186 187 188 189

1.1059936 0.8470423 0.6755790 0.3538097 1.3866970 2.5842175 1.1059936

190 191 192 193 194 195 196

1.5934487 0.9651490 2.2551260 0.4582099 1.9625209 0.3278305 1.5317322

197 198 199 200 201 202 203

2.3386319 1.9625209 0.9651490 0.7512157 1.9625209 1.5934487 1.8404586

204 205 206 207 208 209 210

0.4683468 1.1059936 3.2327460 0.9651490 2.5761129 0.7512157 0.7501376

211 212 213 214 215 216 217

1.0913041 1.1059936 0.5903439 1.1059936 2.3406668 2.8080516 0.7512157

218 219 220 221 222 223 224

2.8420858 1.0943192 0.6666061 0.6666061 0.9651490 0.6666061 0.6755790

225 226 227 228 229 230 231

0.9651490 2.2551260 3.7927381 0.5691712 5.7098541 0.2485810 3.1838656

232 233 234 235 236 237 238

2.2551260 2.8080516 0.6755790 0.2253432 1.8404586 0.6755790 2.2551260

239 240 241 242 243 244 245

0.3538097 1.4988479 0.6555509 1.3905283 1.9625209 0.7512157 0.9651490

246 247 248 249 250 251 252

2.8080516 0.1369348 3.7927381 1.2540137 0.5830744 0.4143670 0.4588685

253 254 255 256 257 258 259

0.5265274 0.6666061 0.6755790 2.6548173 0.5265274 0.6555509 2.8080516

260 261 262 263 264 265 266

4.3462140 0.2533535 0.9651490 2.2489125 1.8404586 1.1059936 0.3538097

267 268 269 270 271 272 273

2.8080516 0.1740002 0.3278305 0.6666061 0.4065615 0.7501376 3.8782612

274 275 276 277 278 279 280

0.7501376 5.4691022 2.2551260 2.8080516 0.6837672 1.7552586 2.4937339

281 282 283 284 285 286 287

1.1059936 2.5842175 0.8470423 3.8782612 3.8782612 0.4582099 0.8470423

288 289 290 291 292 293 294

0.1740002 0.4165673 1.5317322 2.6548173 2.5842175 1.1856157 1.7552586

295 296 297 298 299 300 301

0.1740002 0.6819643 1.8404586 0.6755790 0.3977884 2.8080516 2.5842175

302 303 304 305 306 307 308

2.2551260 0.6755790 0.6755790 0.2485810 2.2551260 1.8032116 0.9651490

309 310 311 312 313 314 315

2.1090376 0.3977884 0.6755790 0.7659948 0.9651490 0.4588685 1.0913041

316 317 318 319 320 321 322

0.6755790 2.5842175 0.6755790 0.5951184 0.2253432 0.5366929 0.2253432

323 324 325 326 327 328 329

0.6755790 1.5785291 5.7098541 0.9651490 2.9520463 1.3329883 2.2551260

330 331 332 333 334 335 336

2.6548173 0.7659948 0.9651490 0.5919750 0.6655837 0.6755790 2.2551260

337 338 339 340 341 342 343

0.9651490 1.1059936 1.9625209 0.4588685 0.6555509 1.9072917 0.6837672

344 345 346 347 348 349 350

1.0943192 0.3538097 1.9625209 1.9625209 0.9651490 0.5903439 0.9330569

351 352 353 354 355 356 357

0.7659948 1.1059936 2.2551260 2.5761129 0.3538097 0.5238017 1.3737132

358 359 360 361 362 363 364

4.7594803 1.3737132 0.9545540 0.6755790 0.4588685 0.7659948 0.6755790

365 366 367 368 369 370 371

0.4065615 0.7501376 2.2489125 0.5951184 2.7707556 0.2241767 3.2327460

372 373 374 375 376 377 378

0.5366929 1.3737132 1.2263944 0.6837672 6.9494726 0.9651490 0.9651490

379 380 381 382 383 384 385

0.6555509 5.7098541 2.5842175 1.5317322 1.6898772 2.2551260 0.4065615

386 387 388 389 390 391 392

3.1838656 7.2553910 5.4691022 4.4564965 1.9625209 1.5317322 0.3538097

393 394 395 396 397 398 399

0.9651490 0.2848566 0.6755790 1.3866970 0.6755790 0.2253432 0.8470423

400 401 402 403 404 405 406

1.1059936 0.9651490 3.8782612 0.6666061 0.9523301 0.4065615 0.4683468

407 408 409 410 411 412 413

0.6546100 0.6755790 0.3689105 1.1059936 0.9733334 1.4706138 0.4588685

414 415 416 417 418 419 420

0.6755790 1.8404586 1.1059936 0.9651490 0.3278305 0.6666061 1.9625209

421 422 423 424 425 426 427

0.5054613 0.9651490 2.2489125 0.5265274 0.3538097 0.4683468 0.6755790

428 429 430 431 432 433 434

0.3538097 1.6369811 2.2551260 1.7455484 0.6755790 0.2241767 0.5054613

435 436 437 438 439 440 441

0.9651490 0.9651490 0.6755790 0.7659948 2.8080516 2.5842175 0.2253432

442 443 444 445 446 447 448

0.6755790 1.5785291 1.3737132 1.1856157 2.8080516 2.2489125 0.3977884

449 450 451 452 453 454 455

0.3606024 0.4683468 0.3219310 0.1369348 1.9625209 1.7552586 1.1059936

456 457 458 459 460 461 462

0.7232338 1.9625209 0.3538097 0.4065615 0.3219310 0.3278305 0.3278305

463 464 465 466 467 468 469

11.0347771 1.3737132 2.5842175 0.9330569 0.3219310 0.5265274 1.5785291

470 471 472 473 474 475 476

2.5842175 2.3406668 0.3538097 0.2253432 0.9651490 1.5785291 5.7098541

477 478 479 480 481 482 483

1.9625209 0.6755790 0.7659948 0.8470423 0.6755790 0.4588685 0.6755790

484 485 486 487 488 489 490

3.7927381 1.3905283 1.9072917 2.8080516 1.2540137 0.9330569 0.2848566

491 492 493 494 495 496 497

0.1740002 0.1956285 1.0721724 2.2551260 0.5265274 0.2784415 0.5830744

498 499 500 501 502 503 504

1.2882728 1.2882728 0.6755790 0.6755790 0.9651490 1.9625209 3.8782612

505 506 507 508 509 510 511

5.6716198 0.1740002 1.9625209 0.3606024 0.6546100 0.9651490 1.6369811

512 513 514 515 516 517 518

0.3538097 2.2551260 0.4588685 0.4683468 0.9651490 6.5611735 6.5611735

519 520 521 522 523 524 525

3.8782612 1.3299011 0.4165673 0.6837672 0.8855294 1.9625209 0.6555509

526 527 528 529 530 531 532

8.3371445 2.5842175 0.6755790 1.8404586 0.5792235 0.3278305 1.1059936

533 534 535 536 537 538 539

0.3278305 0.9651490 2.2551260 0.5792235 3.1838656 0.5792235 2.9742359

540 541 542 543 544 545 546

0.6755790 2.6548173 3.3734203 0.5830744 0.9651490 1.9625209 0.6755790

547 548 549 550 551 552 553

1.6938001 0.4588685 1.3866970 0.9330569 0.9545540 0.9651490 0.4065615

554 555 556 557 558 559 560

1.0913041 6.5611735 0.8584440 1.1059936 1.9072917 1.0721724 6.5611735

561 562 563 564 565 566 567

0.8584440 0.3278305 0.9523301 4.7594803 5.7098541 0.2485810 1.3329883

568 569 570 571 572 573 574

0.3278305 0.8855294 0.6555509 1.3329883 1.1059936 0.9651490 1.9625209

575 576 577 578 579 580 581

0.4065615 0.4683468 0.6755790 3.8782612 1.5317322 1.9625209 0.9651490

582 583 584 585 586 587 588

0.7512157 3.8782612 1.1059936 2.5842175 6.5611735 0.5381117 0.7659948

589 590 591 592 593 594 595

1.9625209 1.5317322 0.3538097 0.4683468 0.4165673 1.3737132 4.4564965

596 597 598 599 600 601

0.3538097 1.2263944 1.5785291 5.7098541 2.2551260 0.9523301

> confusion<- table(prob>0.5,affairs$naffairs)

> confusion

0 1 2 3 7 12

FALSE 112 7 1 0 2 2

TRUE 339 27 16 19 40 36

> accurecy<- sum(diag(confusion))/sum(confusion)

> accurecy

[1] 0.2312812