SAS code:

```
data impair;
input mental ses life;
datalines;
1 1 1
1 1 9
1 1 4
1 1 3
1 0 2
1 1 0
1 0 1
1 1 3
1 1 3
1 1 7
1 0 1
1 0 2
2 1 5
2 0 6
2 1 3
2 0 1
2 1 8
2 1 2
2 0 5
2 1 5
2 1 9
2 0 3
2 1 3
2 1 1
3 0 0
3 1 4
3 0 3
3 0 9
3 1 6
3 0 4
3 0 3
4 1 8
4 1 2
4 1 7
4 0 5
4 0 4
4 0 4
4 1 8
4 0 8
4 0 9
;
data pred;
   input mental ses life;
   datalines;
. 0 4.275
;
```

```
proc logistic data = Impair;
   model mental = life ses / link = clogit;
   score data = pred out = result  CLM;
run;

proc logistic data = Impair;
   model mental = life ses / link = glogit;
   score data = pred out = result2  CLM;
run;

data impair2;
   set impair;
   if mental = 4 then mental = 5;
   if mental = 3 then mental = 4;
run;

proc logistic data = Impair2;
   model mental = life ses / link = clogit;
   score data = pred out = result3  CLM;
run;

proc logistic data = Impair2;
   model mental = life ses / link = glogit;
   score data = pred out = result4  CLM;
run;
```

R code:

```
mental=matrix(c(rep(1,12),rep(2,12),rep(3,7),rep(4,9)  ),nrow=, ncol=1)

y=mental

impair=read.table('D:/My Documents/Courses/STA665/HW2/impair.txt',header=F)

names(impair)=c("mental","ses","life")

x=matrix(c(impair$ses,impair$life),ncol=2)

library(MASS)

library(dr)

result=dr(impair$mental~impair$ses+impair$life,method="sir",nslices=4)

summary(result)
```