```
/*Homework 03 Problem 3.3*/
title 'STAT455-HW03 Problem 3.3';
options ls=72 ps=max nocenter;
data bbal;
do shot_one =0 to 1;
do shot_two =0 to 1;
input count @@;
output;
end;
end;
datalines;
251 34
48 5
;
run;
proc freq data=bbal;
weight count;
table shot_one*shot_two/chisq cellchi2 expected nocol
norow nocum nopercent;
run;

/*Homework 03 Problem 3.12*/
title1 'STAT455-HW03 Problem 3.12';
options ls=72 ps=max nocenter;
data abortion;
do school=1 to 3;
do attitude=1 to 3;
input count @@;
output;
end;
end;
datalines;
209 101 237
151 126 426
16 21 138
;
run;
proc freq data=abortion;
weight count;
table school*attitude/measures agree cl;
run;

/*Homework 03 Problem 3.15*/
title 'STAT455-HW03 Problem 3.15(a)(b) Woolf CI and Exact Cornfield';
options ls=72 ps=max nocenter;
data cancer;
input Treatment $ Normal $ count;
datalines;
1=Y 1=Y 7
1=Y 2=N 8
```

```
2=N 1=Y 0
2=N 2=N 15
;
run;
proc freq data=cancer;
weight count;
table Treatment*Normal/norow nocol nopercent nocum;
exact or/alpha=0.05;
run;
title 'STAT455-HW03 Problem 3.15(c) Profile Likelihood';
options ls=72 ps=max nocenter;
data cancer;
input Treatment $ Normal $ count;
datalines;
1=Y 1=Y 7
1=Y 2=N 8
2=N 1=Y 0
2=N 2=N 15
;
run;
proc logistic data=cancer;
class Treatment(param=ref ref="2=N");
weight count;
```