```
/***********/
/* SAS Code for Chi-square Examples */
/***********/
/* Vacation Destination Preference Example */
data vacation;
      input place $ count;
      datalines;
Hawaii 119
Europe 394
Caribbean 130
Other 285
proc freq data=vacation;
      tables place / chisq testp=(18 40 12 30);
      weight count;
run;
/* Chicken Pox Vaccine Side-effects Example */
data side effects;
      input trt $ swelling $ count;
      datalines;
vaccine major 54
vaccine minor 42
vaccine none 134
placebo major 16
placebo minor 32
placebo none 142
proc freq data=side_effects;
      tables trt * swelling / chisq nocol norow nocum nopercent;
      weight count;
run;
```

```
/* Satisfaction with Appearance by Age Example */
data appearance;
    input age $ satisfied $ count;
    datalines;

1 Yes 38
2 Yes 30
3 Yes 34
1 No 10
2 No 29
3 No 9
;

proc freq data=appearance;
    tables satisfied * age / chisq nocol norow nocum nopercent;
    weight count;
run;
```

/* About the PROC FREQ code:

- > CHISQ requests the Chi-square test (test statistic and p-value)
- > The TESTP= option specifies the null proportions for the null distribution in a test of goodness of fit; notice that they are ordered to match the alphabetical order of the categories (e.g. Caribbean, Europe, Hawaii, Other)
- > The NOCOL ... NOPERCENT options suppress the column, row, cumulative frequencies and percentages (this was done for the sake of shortening the output) */