```sas
*SAS - Cross Tabulations;
/*
Cross tabulation involves producing cross tables also called contingent
 tables using all possible combinations of two or more variables.
In SAS it is created using PROC FREQ along with the TABLES option

Syntax:
PROC FREQ DATA = dataset;
TABLES variable_1*Variable_2;
*/

PROC SQL;
create table CARS1 as
SELECT make, type, invoice, horsepower, length, weight
    FROM
    SASHELP.CARS
    WHERE make in ('Audi','BMW')
;
RUN;

proc FREQ data = CARS1;
tables make*type;
run;

*Cross tabulation of 3 Variables;
PROC SQL;
create table CARS2 as
SELECT make, type,model, invoice, horsepower, length, weight
    FROM
    SASHELP.CARS
    WHERE make in ('Audi','BMW')
;
RUN;
proc FREQ data = CARS2 ;
tables make * (type model)  / nocol norow nopercent;
run;

*Cross tabulation of 4 Variables;
/*
With 4 variables, the number of paired combinations increases to 4.
Each variable from group 1 is paired with each variable of group 2.
*/
proc FREQ data = CARS2 ;
tables (make model) * (length  horsepower)  / nocol norow nopercent;
run;
```