SAS/IML Quick Reference on Printing and Working with Data Sets

Printing

Submit **RESET PRINT;** to ask IML to automatically print any matrix you create (so use only if you are working with small matrices).

Submit **RESET NOPRINT;** to turn off automatic printing.

To print a specific matrix:

PRINT <"message"> <pointer controls> <matrix> <[options]>;

Available pointer controls: , to skip to a new line / to skip to a new page

Options:		
	COLNAME=matrix	matrix of column headings
	ROWNAME=matrix	matrix of row labels
	FORMAT=format	format like 5.3 to be used for printing values

Example:

```
x = { 45.125 50.500,
      75.375 90.825   };
r = { 'Laborer A',
      'Laborer B'  };
c = { 'Net Pay'  'Amount' };
PRINT "Day's Wages", x[ROWNAME=r COLNAME=c FORMAT=12.2];
```

Result:

```
                  Day's Wages
                       X
                  Net Pay       Amount

Laborer A           45.13         50.50
Laborer B           75.38         90.83
```

Creating a matrix from a data set

USE data set name;
READ ALL <VAR list of variables**> <WHERE(**expression**)> <INTO** matrix**>**

Example:

```
USE bios111.class;
READ ALL VAR {age ht wt} WHERE(sex='M') INTO males;
READ ALL VAR {name} WHERE(sex='M') INTO names;
PRINT males[COLNAME={age ht wt} ROWNAME=names];
```

Result:

```
                          MALES
                           AGE        HT         WT

CHRISTIANSEN                37        71        195
HOSKING J                   31        70        160
HELMS R                     41        74        195
FROG K                       3        12          1
```

Creating a data set from a matrix

CREATE data set name **FROM** matrix **VAR{** variable names **};**
APPEND FROM matrix;

or

CREATE data set name **FROM** matrix **[COLNAME=**char matrix or quoted strings**]**
APPEND FROM matrix;