The xcorr data

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The data:

```
3  7 20
4 10 16
6 15 11
9 18  8
```

The SAS code and output:

```
options linesize=70;

data xc;
  infile "xcorr.dat";
  input x1 x2 x3;

proc princomp out=fredd;

proc print;

proc corr data=xc out=fred;

proc print;
```

```
The PRINCOMP Procedure
Observations           4
Variables              3

                   Simple Statistics
                   x1                x2                x3
Mean       5.500000000       12.50000000       13.75000000
StD        2.645751311        4.93288286        5.31507291

          Correlation Matrix
            x1          x2          x3
```

x1	1.0000	0.9705	-.9600
x2	0.9705	1.0000	-.9980
x3	-.9600	-.9980	1.0000

Eigenvalues of the Correlation Matrix

	Eigenvalue	Difference	Proportion	Cumulative
1	2.95246508	2.90606797	0.9842	0.9842
2	0.04639711	0.04525931	0.0155	0.9996
3	0.00113780		0.0004	1.0000

Eigenvectors

	Prin1	Prin2	Prin3
x1	0.573008	0.811813	-.112340
x2	0.580531	-.305305	0.754833
x3	-.578486	0.497743	0.646225

Obs	x1	x2	x3	Prin1	Prin2	Prin3
1	3	7	20	-1.86896	0.15861	0.024434
2	4	10	16	-0.86397	-0.09482	-0.045298
3	6	15	11	0.70181	-0.25884	0.026967
4	9	18	8	2.03111	0.19505	-0.006103

The CORR Procedure

3 Variables: x1 x2 x3

Simple Statistics

Variable	N	Mean	Std Dev	Sum
x1	4	5.50000	2.64575	22.00000
x2	4	12.50000	4.93288	50.00000
x3	4	13.75000	5.31507	55.00000

Simple Statistics

Variable	Minimum	Maximum
x1	3.00000	9.00000
x2	7.00000	18.00000
x3	8.00000	20.00000

Pearson Correlation Coefficients, N = 4

Prob > |r| under H0: Rho=0

	x1	x2	x3
x1	1.00000	0.97054	-0.96001
		0.0295	0.0400
x2	0.97054	1.00000	-0.99802
	0.0295		0.0020
x3	-0.96001	-0.99802	1.00000
	0.0400	0.0020	

Obs	_TYPE_	_NAME_	x1	x2	x3
1	MEAN		5.50000	12.5000	13.7500
2	STD		2.64575	4.9329	5.3151
3	N		4.00000	4.0000	4.0000
4	CORR	x1	1.00000	0.9705	-0.9600
5	CORR	x2	0.97054	1.0000	-0.9980
6	CORR	x3	-0.96001	-0.9980	1.0000