## Homework One

Jeremy Harper STA4702 01.11.12

14b.

				- group=0 -				
			The	CORR Proce	dure			
		5 Variables	: x1	x2	<b>x</b> 3	x4	x5	
			Covaria	nce Matrix,	DF = 6	58		
		x1	x2		х3		x4	x
<b>κ</b> 1	277.632	21398	95.3983802	5.36	12106	103.	7235720	3.2414749
2	95.39		12.2947485		63768		7850298	2.042267
κ3 - 4		12106	1.7663768	1.8050298 2.2348167		2.2348167		0.5013640
x4 x5	103.723 3.243	14749	06.7850298 2.0422677		13640		2288150 3511168	2.351116 2.355464
_				ple Statist	ıcs			
Varia	ble	N	Mean	Std Dev		Sum	Minimum	Maximum
x1		69 3	7.98551	16.66230		2621	18.00000	79.00000
x2			7.28986	10.59692		10163	125.40000	176.80000
x3			1.56232	1.34351		.80000	0	5.60000
x4 x5			5.60290 1.62029	13.60988 1.53475		13497 .80000	169.20000	235.60000 6.00000
		x1	x2		<b>x</b> 3	x	4	x5
	x1	1.00000	0.54029	0.23		0.4573		
			<.0001	0.0	475	<.000	1 0.2	993
	x2	0.54029	1.00000	0.12	407	0.7404	2 0.12	557
		<.0001		0.3		<.000		039
	<b>x</b> 3	0.23949	0.12407	1.00	000	0.1222	2 0.24	315
		0.0475	0.3098			0.317	1 0.0	441
	x4	0.45739	0.74042	0.12	222	1.0000	0 0.11	256
		<.0001	<.0001	0.3	171		0.3	571
	<b>x</b> 5	0.12676 0.2993	0.12557 0.3039	0.24		0.1125 0.357		000
		0.2330	Jeremy Harp				=	
			- or omy marp	110016	5.10 (		Wednesday,	January 11,
				- group=1 -				
			The	CORR Proce	dure			
		5 Variables	: x1	x2	<b>x</b> 3	x4	х5	
			Covaria	nce Matrix,	DF = 2	28		
		x1	x2		<b>x</b> 3		x4	X.
к1	101 1	37931	52.795074	20.2	19704	60	.133498	-29.820197
	121 1	4/441	57 /U507/A	- 20 2				

x2 52.795074		95074	844.680788	244.	463153	912.414926 232.365419		106.764089	
	x3 -20.219704		244.463153		264039			297.319212	
	4 68.13		912.414926		365419		032217	81.097340	
×	:5 -29.82	20197	106.764089	297•	319212	01.	097340	351.047192	
			S	imple Statis	tics				
	Variable	N	Mean	Std Dev	Si	um	Minimum	Maximum	
	x1	29	42.06897	11.00627	12:	20	23.00000	59.00000	
	x2	29	178.26897	29.06339	51		134.40000	238.40000	
	x3		12.27586	17.81191	356.000		0	90.20000	
	x4		236.93103	34.35160	68		176.80000	328.00000	
	x5	29	13.08276	18.73625	379.400	00	0	83.00000	
		P	earson Corre	lation Coeff.		= 29			
x1 x2 x3 x4 x5									
	x1	1.00000	0.165	05 -0.1	0314	0.18021	-0.1446	5.1	
	XI	1.00000	0.39		5944	0.3496			
	x2	0.16505	1.000	0.4	7223	0.91390	0.1960	16	
	AL	0.3922	1.000		0097	<.0001			
	х3	-0.10314	0.472	23 1.0	0000	0.37976	0.8909	90	
	AS	0.5944	0.00			0.0422			
	x4	0.18021	0.913	90 0.3	7976	1.00000	0.1260	00	
		0.3496	<.00		0422		0.514		
	<b>x</b> 5	-0.14461	0.196	06 0.8	9090	0.12600	1.0000	00	
		0.4542	0.30	80 <.	0001	0.5149			
15b.	•								
			Jeremy Ha	rper - Probl	em Two (15b		Wodnoeday T	4 anuary 11, 2012	
			m	he CORR Proc	aduro	14.23	wednesday, o	anuary 11, 2012	
	6 7	/ariables:		x2 x3	x4	x5	<b>x</b> 6		
	6 \	/ariables:	XI .	xz xs	Х4	хэ	ХO		
Covariance Matrix, DF = 97									
	x1		x2	х3	:	x4	x5	x6	
x1	4.654750889	0.9313	15370 0 1	589699088	0.2769153	00	1.074885659	0.158150852	
x2	0.931345370	0.6128		110933412	0.1184690		0.388886434	-0.024851988	
x3	0.589699088	0.1109		571428861	0.0870049		0.347989910	0.110131391	
x4	0.276915309	0.1184	69052 0.	087004959	0.1104090	72	0.217405649	0.021814433	
x5	1.074885659	0.3888	36434 0.3	347989910	0.2174056		0.862172372	-0.008817694	
х6	0.158150852	-0.0248	51988 0.	110131391	0.0218144	33 –	0.008817694	0.861455923	
			S	imple Statis	tics				
	Variable	N	Mean	Std Dev	S	um	Minimum	Maximum	
	x1	98	3.54235	2.15749	347.150	00	0	10.46100	
	x2	98	1.80936	0.78283	177.317		0.94100	4.00000	
	x3	98	2.13760	0.75593	209.485		0.66600	4.00000	
	x4	98	2.20900	0.33228	216.482	00	1.28600	2.93700	
	x5	98	2.57483	0.92853	252.333		1.00000	5.00000	
	x6	98	1.27551	0.92815	125.000	00	0	3.00000	
		T).	Parson Corro	lation Cooff	iciente M	= 98			
Pearson Correlation Coefficients, N = 98 Prob > $ r $ under H0: Rho=0									

x1 x2 x3 x4 x5 x6

x1	1.00000	0.55144 <.0001	0.36158 0.0003	0.38627 <.0001	0.53656 <.0001	0.07898 0.4395
x2	0.55144 <.0001	1.00000	0.18746 0.0645	0.45544 <.0001	0.53501 <.0001	-0.03420 0.7381
х3	0.36158 0.0003	0.18746 0.0645	1.00000	0.34639 0.0005	0.49578 <.0001	0.15697 0.1227
x4	0.38627 <.0001	0.45544 <.0001	0.34639 0.0005	1.00000	0.70465 <.0001	0.07073 0.4889
<b>x</b> 5	0.53656 <.0001	0.53501 <.0001	0.49578 <.0001	0.70465 <.0001	1.00000	-0.01023 0.9204
х6	0.07898 0.4395	-0.03420 0.7381	0.15697 0.1227	0.07073 0.4889	-0.01023 0.9204	1.00000

<sup>15</sup>b. All variables are positively correlated, except x6 (skin reaction) with all other variables.