HW11
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These are the solutions in blue to at least 60% of the problems for chapter 11.
Everything that is not in blue is part of my notes.

CSDATA Table found on page D-3 for problems 11.1, and 11.5 .

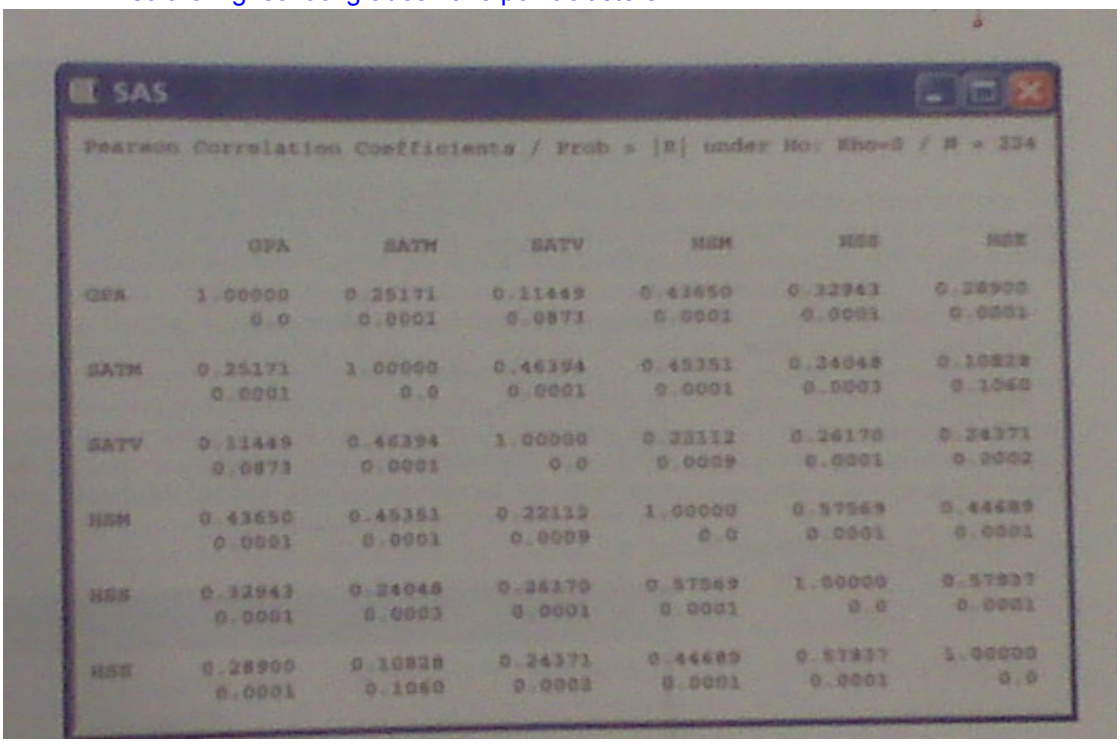
OBS	GPA	HSM	HSS	HSE	SATM	SATV
1	3.32	10	10	10	670	600
2	2.26	6	8	5	700	640
3	2.35	8	6	8	640	530
4	2.08	9	10	7	670	600
5	3.38	8	9	8	540	580

Problem 11.1

part a The responsible variable is Math GPA.
part b The number of cases is equal to 106.
part c The number of explanatory variables is 4.
part d The explanatory variables are mathematics placement score, class rank, SAT Verbal, and SAT Math.

Problem 11.5

From the below picture which is Figure 11.3 from our textbook. We can easily see the pairs with the correlations that are the largest are easy to pick out.
Also the highschool grades have point clusters.



Problem 11.7	n	coef of x1	SE_b_1	95% Confid.
part a	30	10.8	2.4	{5.87 15.72}
part b	53	10.8	2.4	{5.97 15.62}
part c	30	10.8	2.4	{5.86 15.72}
part d	2.4	10.8	2.4	{6.04 15.55}

Problem 11.21

Since the coefficients are positive, so the relationship is positive. The unfavorable coefficients are larger, so they have a stronger effect as a result.

Problem 11.23

The coefficient of the new quadratic term is the same as the old one. However, the coefficient and constant have changed of accounts have changed.

SEX
1
1
1
1
1