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log: x:\example_sil.log
log type: text
opened on: 28 Mar 2008, 10:46:56

. infix prestige 1-2 papres 3-4 age 5-6 ed 7-8 paed 9-10 maed 11-12 sex 13 race 14 region 16 15 ///
> size 19-22 bwlaw 24 class10 29-30 memnum 31-32 contact 49 activism 50-51 ///
> using "s:\703 Kaufman\bwmarry." if race<=1
(1374 observations read)

```

```

. ** COMMENT reverse direction of class variable so that high value = high
. generate class=11-class10

```

```

. ** COMMENT recode variables so that STATA will recognize missing
. mvdecode maed paed, mv(21/99=.)
    maed: 185 missing values generated
    paed: 389 missing values generated

```

```

. mvdecode papres prestige, mv(0=.)

```

```

. summarize

```

Variable	Obs	Mean	Std. Dev.	Min	Max
prestige	1308	39.7844	14.19493	12	82
papres	1145	39.76507	13.49714	14	82
age	1374	43.98544	17.10453	18	89
ed	1374	12.59607	3.111759	0	20
paed	985	10.3269	4.377132	0	20
maed	1189	10.64003	3.603442	0	20
sex	1374	.4250364	.4945285	0	1
race	1374	.7387191	.4394926	0	1
region16	1374	.3508006	.4773944	0	1
size	1374	418.4279	1258.698	0	7072
bwlaw	1374	.2088792	.4066559	0	1
class10	1374	5.194323	1.859821	1	10
memnum	1374	1.745997	1.939424	0	16
contact	1374	1.414847	1.145477	0	3
activism	1374	2.136099	2.36747	0	14
class	1374	5.805677	1.859821	1	10

```

. regress memnum age ed sex size class

```

Source	SS	df	MS	Number of obs =	1374
Model	638.274333	5	127.654867	F(5, 1368) =	38.58
Residual	4526.07865	1368	3.30853703	Prob > F =	0.0000
				R-squared =	0.1236
				Adj R-squared =	0.1204
Total	5164.35298	1373	3.76136415	Root MSE =	1.8189

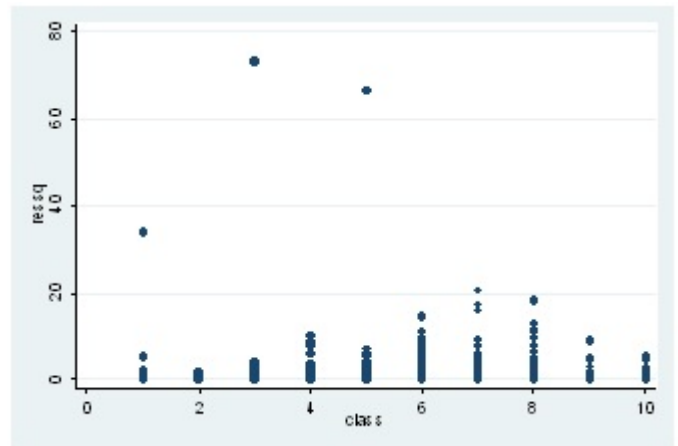
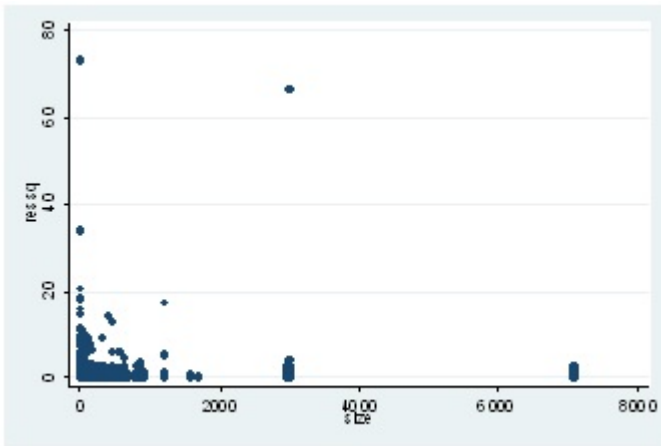
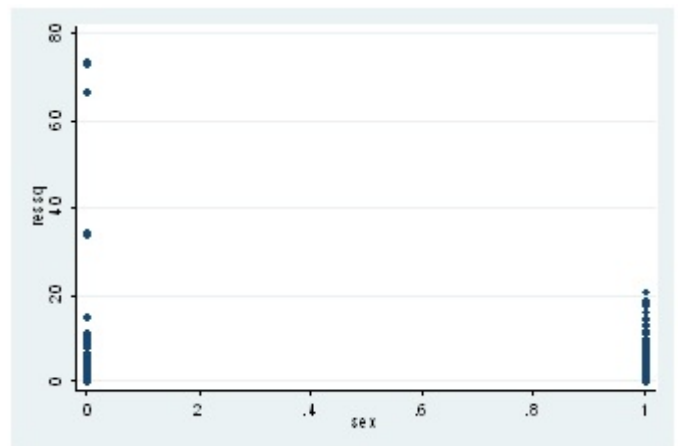
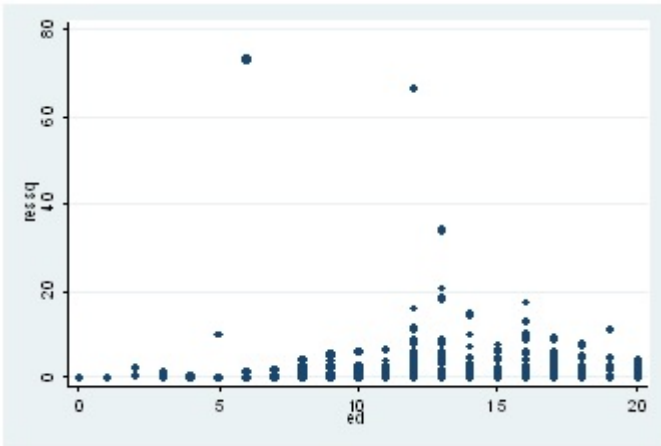
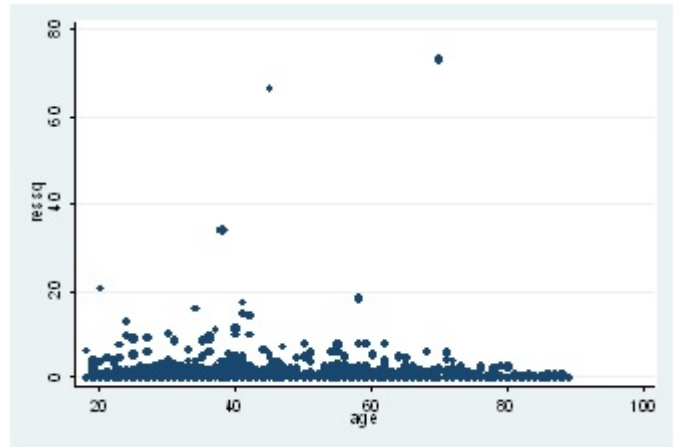
memnum	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
age	.0100229	.0030574	3.28	0.001	.0040253 .0160206
ed	.204776	.0175326	11.68	0.000	.1703823 .2391698
sex	.1380453	.0995804	1.39	0.166	-.0573014 .3333921
size	-.0001312	.0000391	-3.36	0.001	-.0002078 -.0000545
class	.0705414	.027651	2.55	0.011	.0162985 .1247844
_cons	-1.687573	.3070135	-5.50	0.000	-2.289841 -1.085305

```

. predict resmem, rstand
. predict predmem, xb

. outreg2 using x:\ols_example, replace excel noaster title(OLS Regression Example) bdec(6)
"x:\ols_example.xml"
seeout
.
. generate ressq= resmem^2
.
. scatter ressq age, name(age)
. scatter ressq ed, name(ed)
. scatter ressq sex, name(sex)
. scatter ressq size, name(size)
. scatter ressq class, name(soc_class)
.

```



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. ** COMMENT Next lines show how to calculate maximum ln likelihood
> ** estimate of the mean age to a whole number assuming std dev=17
> ** ln likelihood= -1/2 *[(age - mean)/stddev]^2 + log [1/(sqrt(2*pi)*stddev)] */
.
. scalar pival=(2*_pi)^.5

. gen m35s17 =-.5*((age- 35)/ 17)^2+log(1/(pival* 17))
. gen m36s17 =-.5*((age- 36)/ 17)^2+log(1/(pival* 17))
. gen m37s17 =-.5*((age- 37)/ 17)^2+log(1/(pival* 17))
. gen m38s17 =-.5*((age- 38)/ 17)^2+log(1/(pival* 17))
. gen m39s17 =-.5*((age- 39)/ 17)^2+log(1/(pival* 17))
. gen m40s17 =-.5*((age- 40)/ 17)^2+log(1/(pival* 17))
. gen m41s17 =-.5*((age- 41)/ 17)^2+log(1/(pival* 17))
. gen m42s17 =-.5*((age- 42)/ 17)^2+log(1/(pival* 17))
. gen m43s17 =-.5*((age- 43)/ 17)^2+log(1/(pival* 17))
. gen m44s17 =-.5*((age- 44)/ 17)^2+log(1/(pival* 17))
. gen m45s17 =-.5*((age- 45)/ 17)^2+log(1/(pival* 17))
. gen m46s17 =-.5*((age- 46)/ 17)^2+log(1/(pival* 17))
. gen m47s17 =-.5*((age- 47)/ 17)^2+log(1/(pival* 17))
. gen m48s17 =-.5*((age- 48)/ 17)^2+log(1/(pival* 17))
. gen m49s17 =-.5*((age- 49)/ 17)^2+log(1/(pival* 17))
. gen m50s17 =-.5*((age- 50)/ 17)^2+log(1/(pival* 17))

.
. tabstat m35s17 m36s17 m37s17 m38s17 m39s17 m40s17 m41s17 m42s17 m43s17 m44s17 /*
> */ m45s17 m46s17 m47s17 m48s17 m49s17 m50s17, stat(sum)col(stat)

```

variable	sum
m35s17	-6042.353
m36s17	-6002.01
m37s17	-5966.422
m38s17	-5935.588
m39s17	-5909.509
m40s17	-5888.183
m41s17	-5871.612
m42s17	-5859.796
m43s17	-5852.734
m44s17	-5850.426
m45s17	-5852.872
m46s17	-5860.073
m47s17	-5872.028
m48s17	-5888.737
m49s17	-5910.201
m50s17	-5936.419

```

.
.
end of do-file

. log close
log: x:\example_sil.log
log type: text
closed on: 28 Mar 2008, 10:50:00
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