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. use /Users/piamahajan/Downloads/cps09mar.dta
(Written by R. )

.
. gen experience= age-education-6

. gen experience_ = experience^2/100

. reg l_earnings education experience experience_ ib7.marital if race== 1 & female==0 & hisp==1,r

Linear regression               Number of obs   =      4,230
                                F(8, 4220)      =      .
                                Prob > F         =      .
                                R-squared         =      0.2598
                                Root MSE      =      .5832

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l_earnings	Coefficient	Robust std. err.	t	P> t	[95% conf. interval]	
education	.0925492	.0030397	30.45	0.000	.0865898	.0985087
experience	.0294656	.0029174	10.10	0.000	.0237461	.0351852
experience_	-.0389595	.005693	-6.84	0.000	-.0501208	-.0277982
marital						
1	.2011946	.0253088	7.95	0.000	.151576	.2508132
2	-.121433	.0190438	-6.38	0.000	-.1587688	-.0840971
3	-.0249394	.0576897	-0.43	0.666	-.1380416	.0881627
4	.2129599	.1768278	1.20	0.229	-.1337157	.5596354
5	.0715837	.0454053	1.58	0.115	-.0174346	.1606019
6	.0106559	.0527091	0.20	0.840	-.0926818	.1139935
_cons	8.811622	.0478596	184.11	0.000	8.717792	8.905452

b)

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. *part b
. constraint define 1 i1.marital-i4.marital=0

. constraint define 2 i5.marital-i6.marital=0

. cnsreg l_earnings education experience experience_ ib7.marital if race== 1 & female==0 & hisp==1, c(1,2) r

Constrained linear regression       Number of obs =   4,230
                                    F(7, 4222)      =  485.99
                                    Prob > F         =  0.0000
                                    Root MSE       =  0.5831

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( 1) 1.marital - 4.marital = 0
( 2) 5.marital - 6.marital = 0

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l_earnings	Coefficient	Robust std. err.	t	P> t	[95% conf. interval]	
education	.0926892	.0030352	30.54	0.000	.0867386	.0986397
experience	.0295853	.0029115	10.16	0.000	.0238772	.0352934
experience_	-.0391396	.0056821	-6.89	0.000	-.0502794	-.0279998
marital						
1	.2007025	.0252972	7.93	0.000	.1511067	.2502983
2	-.1210816	.0190348	-6.36	0.000	-.1583999	-.0837634
3	-.0251486	.0576869	-0.44	0.663	-.1382452	.087948
4	.2007025	.0252972	7.93	0.000	.1511067	.2502983
5	.0520476	.038381	1.36	0.175	-.0231994	.1272946
6	.0520476	.038381	1.36	0.175	-.0231994	.1272946
_cons	8.808938	.0477254	184.58	0.000	8.715371	8.902505