```
log using "c:\temp\margins workshop 4.log", replace

set more 1


use http://www.stata-press.com/data/r14/margex, clear

sum y outcome sex age

**********************************
* 1. Continuous Dependent variables
**********************************

reg y i.sex##c.age

        ************************************************************
        * 1.1 Average Adjusted Prediction and Average Marginal Effect
        ************************************************************
        margins  i.sex
        margins, dydx(i.sex)

        ********************************************************************
        * 1.2 Adjusted Predictions and Marginal Effects at the Means
        ********************************************************************
        margins  i.sex,       atmeans
        margins, dydx(i.sex) atmeans

        ********************************************************************
        * 1.3 Adjusted Predictions and Marginal Effects at Representative values
        ********************************************************************
        margins  i.sex,       at(age=(20(10)60))
        margins, dydx(i.sex) at(age=(20(10)60))


**********************************
* 2. Binary Dependent variables
**********************************

logit outcome i.sex##c.age

        ************************************************************
        * 2.1 Average Adjusted Prediction and Average Marginal Effect
        ************************************************************
        margins  i.sex
        margins, dydx(i.sex)

        ********************************************************************
        * 2.2 Adjusted Predictions and Marginal Effects at the Means
        ********************************************************************
        margins  i.sex,       atmeans
        margins, dydx(i.sex) atmeans

        ********************************************************************
        * 2.3 Adjusted Predictions and Marginal Effects at Representative values
        ********************************************************************
        margins  i.sex,       at(age=(20(10)60))
        margins, dydx(i.sex) at(age=(20(10)60))



*****************************
* 3. Nominal Dependent Variable
*****************************

mlogit group i.sex##c.age

        ************************************************************
        * 3.1 Average Adjusted Prediction and Average Marginal Effect
        ************************************************************
        margins  i.sex
        margins, dydx(i.sex)

        ********************************************************************
        * 3.2 Adjusted Predictions and Marginal Effects at the Means
        ********************************************************************
        margins  i.sex,       atmeans
        margins, dydx(i.sex) atmeans

        ********************************************************************
        * 3.3 Adjusted Predictions and Marginal Effects at Representative values
        ********************************************************************
        margins  i.sex,       at(age=(20(10)60))
        margins, dydx(i.sex) at(age=(20(10)60))
```

```
*************************************************
* 4. Data collected with complex survey design
*************************************************
use "c:\temp\margins.dta", clear


svydes

sum illness sex age

svy: reg illness i.sex##c.age

        ***************************************************************
        * 4.1 Average Adjusted Prediction and Average Marginal Effect
        ***************************************************************
        margins  i.sex,       vce(unconditional)
        margins, dydx(i.sex) vce(unconditional)

        ***********************************************************************
        * 4.2 Adjusted Predictions and Marginal Effects at the Means
        ***********************************************************************
        margins  i.sex,       atmeans vce(unconditional)
        margins, dydx(i.sex) atmeans vce(unconditional)

        ***********************************************************************
        * 4.3 Adjusted Predictions and Marginal Effects at Representative values
        ***********************************************************************
        margins  i.sex,       at(age=(20(10)80)) vce(unconditional)
        margins, dydx(i.sex) at(age=(20(10)80)) vce(unconditional)



*************************************
* 5. Margins with the imputed data
*************************************

webuse mheart1s20, clear
mi convert flong
mi estimate , saving(c:\temp\miestfile.dta, replace) esample(esample) : logit attack smokes age bmi hsgrad female

        ****************************
        * 5.1 Average Adjusted Prediction and Average Marginal Effect
        ****************************
        mimrgns using c:\temp\miestfile.dta , esample(esample) predict(pr) dydx(*)
        mimrgns using c:\temp\miestfile.dta , esample(esample) dydx(*)



*********************************************************
* 6. Plotting the results from the -margins- command
*********************************************************

use http://www.stata-press.com/data/r14/margex, clear
mlogit group i.sex##c.age


        ****************************************
        * Plotting the Adjusted Predictions
        ****************************************
        margins  i.sex,       at(age=(20(10)60))
        marginsplot, yline(0)
        marginsplot, by(sex) yline(0)

        ****************************************
        * Plotting the marginal effect
        ****************************************
        margins, dydx(i.sex) at(age=(20(10)60))
        marginsplot, yline(0)


log close
```