log using "Lab Notes 4", replace text

spex anes\_timeseries\_cdf

\*\*\*Today will be a bit disjointed, in that we will be doing three different///

\*\*\*Things that will all come together on problem set four\*\*

\*\*\*Do not forget to look at previous lab notes when trying to remember///

\*\*\*How to do things like label, which you will have to do on all///

\*\*\*Subsequent labs\*\*

\*\*\*First, we will discuss how to recode things\*\*\*

\*\*\*Say you want to turn a continuous variable into a dichotomous variable\*\*

\*\*\*We will work with a feeling thermometer and label half the values///

\*\*\*Low, and half high///

tab VCF0228

gen Congress\_ft= VCF0228

\*\*\*We want to recode the missing data so it does not influence our results\*\*\*

recode Congress\_ft 98=.

recode Congress\_ft 99=.

recode Congress\_ft 0/49=1

\*\*\*Remember that two numbers separated by a slash means all values between///

\*\*\*The two numbers\*\*\*

recode Congress\_ft 50/97=2

label var Congress\_ft "Congress-Dichotomous"

label define Congress 1"Disapprove" 2"Approve"

label val Congress\_ft Congress

tab Congress\_ft, m

\*\*\*Next, we will combine variables\*\*\*

\*\*\*Say you wanted to create a variable about feelings toward Judeo-Christian ///

\*\*\*Religions based on an average of feeling thermometer about three different///

\*\*\*Groups///

\*\*\*Again recode missing data\*\*\*

recode VCF0203 98=.

recode VCF0203 99=.

recode VCF0204 98=.

recode VCF0204 99=.

recode VCF0205 98=.

recode VCF0205 99=.

\*\*\*Then create the new variable\*\*\*

gen JC\_ft= (VCF0203+VCF0204+VCF0205)/3

label var JC\_ft "Judeo-Christian Feeling Thermometer"

sum JC\_ft

\*\*\*Now we want to create a publication quality table\*\*\*

\*\*\*First we must download the estout package\*\*\*

ssc install estout

\*\*\*First, use the estpost sum var1 var2 command to tell stata what we're///

\*\*\*Working with\*\*\*

estpost sum JC\_ft Congress\_ft

\*\*Obviously this table needs some formatting\*\*\*

esttab, modelwidth(12) cell("count(label(Observations)) mean(label(Mean)) sd(label(Standard Deviation)) min(label(Minimum)) max(label(Maximum))") label nonumber nomtitle

\*\*\*Note that esttab does not ask for variable names, so make sure you///

\*\*\*run estpost first\*\*\*

\*\*When we test for significance in Stata we use the command ttest

\*\*ttest only makes comparisons between two groups

\*\*the basic syntax is ttest depvar if group==1|group==2, by(group)

ttest VCF0702 if VCF0105b==1|VCF0105b==2, by(VCF0105b)

\*\*the output gives you lots of information. Including the null, the alternative

\*\*the degrees of freedom, and the test statistic.

\*\*the Ha middle value at the bottom is the two-tailed test,

\*\*and hte one-tailed tests are also displayed.

\*\*with ttest you can also compare 2 group means to each other

ttest VCF0702==VCF0105b

\*\*this comparison makes little sense, but the command will run it

\*\*the ttest command will give you the t-statistic,

\*\*but with large samples the z and t statistics are the same

\*\*the other method commonly used in experimental analyses are ANOVA models.

\*\*the basic command is anova dv iv iv

anova VCF0702 VCF0105b

\*\*if you want to test an interactive effect you use the ## operator

anova VCF0702 VCF0105b##VCF0104

\*\*Using the ## operator will give you the effect of the interaction and the main effects

\*\*\*The regress command will allow you to run an ordinary least squares regression\*\*\*

\*\*\*Today we will just run a bivariate regression\*\*\*

\*\*\*Note that OLS requires a continuous dependent variable\*\*\*

\*\*\*The syntax is reg depvar indvar\*\*\*

\*\*\*For multiple regression, you will have multiple independent variables\*\*\*

reg JC\_ft Congress\_ft

\*\*\*We can make this into a publication quality table with esttab\*\*\*

esttab, label nonumber

\*\*This is the basic command, but we can play with it\*\*\*

\*\*\*You can specify a title, report z instead of t statistics///

esttab, label nonumber title("Regression Model One") z

\*\*\*You can also specify different values for the significance stars\*\*\*

esttab, label nonumber star(+ .07 \* .051 \*\* .00001)

\*\*\*Because we recoded the data, remember to save only the do file and not the///

\*\*\*dta file\*\*\*