To download Eviews 10 student version –free:

http://www.eviews.com/download/download.shtml#eviews10sv

Open an excel file in eviews:

File > Open > Foreign Data as Workfile and select Excel file

Opening a .wf1 file:

File > Open > EViews Workfile and select file

Useful commands

- Quick:
 - o Sample: To select the sampling period
 - Generate series: to create a new series by equation

Generate Series by Equation	X
Enter equation	
dif_gdp=gdp-gdp(1)	
Sample	
1959Q1 2006Q4	
OK Cancel	

Alternatively, we can use the command line:



 Estimate Equation: (this is the way to do it in EViews 10 – in past versions of EViews it's simpler – just type the equation and run or (choose White covariance method))

Equation Estimation	×
Specification Options	
Equation specification Dependent variable followed by list of regressors including ARMA and PDL terms, OR an explicit equation like Y=c(1)+c(2)*X.	
gdp c ar(1) ma(1) sma(1)	
Estimation settings	
Method: LS - Least Squares (NLS and ARMA)	
Sample: 1959q1 2006q4	
OK Cance	

And select **options**:

Equation Estimation				
Specification Options				
Coefficient covariance Covariance Rethod: Info matrix: OPC	ARMA Method: CLS V Starting ARMA coefficient values: OLS/TSLS V Backcast MA terms			
Optimization Optimization method: Step method: Marquardt Maximum iterations: Convergence tolerance: Display settings in output	Coefficient name			
	OK Cancel			

Equation	on: UNTITLED	Workfile: U	JSREALGDF	::Usrealgdp\	
View Proc Object Prir	nt Name Freeze	Estimate For	ecast Stats R	esids	
Dependent Variable: G Method: ARMA Condition steps) Date: 09/14/18 Time: Sample (adjusted): 19 Included observations: Failure to improve likel Huber-White-Hinkley (H and covariance MA Backcast: 1958Q4	DP 21:49 59Q2 2006Q4 : 191 after adjus ihood (non-zero HC1) heteroske 1959Q1	tres (Gauss-Ne tments gradients) afte dasticity consis	ewton / Marqu er 50 iteration stent standard	ardt s 1 errors	
Variable	Coefficient	Std. Error	t-Statistic	Prob.	
C AR(1) MA(1) SMA(1)	-15.44866 1.006328 0.095066 0.095439	17.12120 0.001401 237.5290 237.5285	-0.902312 718.1961 0.000400 0.000402	0.3681 0.0000 0.9997 0.9997	
R-squared Adjusted R-squared S.E. of regression Sum squared resid Log likelihood F-statistic Prob(F-statistic)	0.999722 0.999718 0.441097 36.38399 -112.6645 224133.4 0.000000	Mean dependent var S.D. dependent var Akaike info criterion Schwarz criterion Hannan-Quinn criter. Durbin-Watson stat		61.93217 26.24411 1.221617 1.289728 1.249205 1.955142	
Inverted AR Roots Inverted MA Roots	1.01 Estimated AR 10	process is nor 10	nstationary		

To analyze the residuals: View-> Residual Diagnostics....

To save the residuals: Proc-> Make residual series

To estimate a GARCH model:

Quick-> Estimate Equation and in method select ARCH

	Equatio	n Estimation			x	
Specification Options						
Mean equation						
Dependent followed	by regressors & AR	MA terms OR exp	licit equation:	ARCH-M:		
3-+(-)				None 🗸 🗸	. 1	
Variance and distribut	tion specification —					
Model: GARCH/TAR	CH V	Variance regre	ssors:			
Order:						
ARCH: 1 Three	eshold order: 0					
GARCH: 1	м	Error <u>d</u> istributi	on:			
Restrictions: Norie	•	Normai (Gauss	sidri) 1			
Estimation settings						
Method: ARCH - Au	utoregressive Cond	itional Heterosked	lasticity	*		
Sample: 1959q120	06q4					
			ОК	Cancel		Click OK
Equation: U	JNTITLED W	orkfile: USR	EALGDP::Us	realgdp\	_	
View Proc Object Pri	nt Name Freeze	Estimate For	ecast Stats R	esids		<u>^</u>
Method: ML ARCH - No	ormal distributio	n (BFGS / Marq	uardt steps)			
Date: 09/14/18 Time: Sample (adjusted): 19	22:19 5902 200604					
Included observations	: 191 after adjus	tments				
Coefficient covariance	computed using	ns 3 outer product	of gradients			
MA Backcast: 1959Q1 Presample variance: b	ackcast (param	eter = 0.7)				
GARCH = C(4) + C(5)*	RESID(-1) ⁴ 2 + 0	C(6)*GARCH(-1)			
Variable	Coefficient	Std. Error	z-Statistic	Prob.		
С	-17.00480	16.70902	-1.017702	0.3088		
AR(1) MA(1)	1.006730 0.158991	0.001374 0.082075	732.5304 1.937145	0.0000 0.0527		
	Variance	Equation				
	0.0120/6	0.010015	1 202624	0 1961		
RESID(-1) ²	0.119975	0.065012	1.845430	0.0650		
GARCH(-1)	0.819479	0.080798	10.14237	0.0000		
R-squared	0.999719	Mean depend	lent var ent var	61.93217		
S.E. of regression	0.442421	Akaike info criterion 1.183012				
Sum squared resid	36.79850	Schwarz criter Hannan-Ouin	rion n criter	1.285178		
Durbin-Watson stat	1.865176	. rannan-oxum	n ontor.	1.224004		
Inverted AR Roots	1.01					
Inverted MA Roots	Estimated AR 16	process is no	nstationary			
						~

Double click on the series you want to analyze and:

- View:
 - Spreadsheet: to see the series of observations
 - Graph: to make a plot of the series
 - We can look at some transformations of the series by selecting from the drop-down list:



- Descriptive Statistics and Tests (to analyze series (mean, stdev,...), Jarque-Bera test)
- Correlogram (you can choose level, first differences, second differences to compute PACF and ACF – Ljung-Box test is automatic)

o Unit Root test:

Unit Ro	oot Test 🛛 🗙
Test type Augmented Dickey-Fuller	~
Test for unit root in • Level • 1st difference • 2nd difference	Lag length ● Automatic selection: Schwarz Info Criterion ∨
Include in test equation Intercept Trend and intercept None	Maximum lags: 14
	OK Cancel

- PROC:
- Sample: to select the sample period

Code to simulate an MA(1) process:

series e=0.5*nrnd series y=2+0.5*e(-1) +e

Code to simulate an AR(1) process:

smpl @first @first series y=0 smpl @first+1 @last series y=1+0.4*y(-1)+0.5*nrnd