q1

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VisionZ; very useful!; do watch them! (qgis2 not 3)

◇ the whole thing `https://www.youtube.com/watch?v=`
`KjvFil3o4y8&list=PLNCPalajQvg7wQvzf3fM8fOZ5lMKl86Q4`

◇ 01 - open and view data
`https://www.youtube.com/watch?v=KjvFil3o4y8&list=`
`PLNCPalajQvg7wQvzf3fM8fOZ5lMKl86Q4&index=1`

◇ 04 - Working with attributes
`https://www.youtube.com/watch?v=G6UeiGg2Cp8&list=`
`PLNCPalajQvg7wQvzf3fM8fOZ5lMKl86Q4&index=4`

◇ 07 - Basic vector styling
`https://www.youtube.com/watch?v=b-0MQ7dnVJk&index=`
`7&list=PLNCPalajQvg7wQvzf3fM8fOZ5lMKl86Q4`

◇ 03 - print composer
`https://www.youtube.com/watch?v=YnqbC1hkfnk&list=`
`PLNCPalajQvg7wQvzf3fM8fOZ5lMKl86Q4&index=3`

other references

◇ http://www.youtube.com/results?search_query=qgis
   not sure, any of these useful in particular? email listserv

◇ pretty good and comprehensive; in-depth but easy to
   navigate reference http://www.qgistutorials.com/en/

◇ http://www.qgistutorials.com/en/docs/teach_qgis.html

◇ Good howto, references

· http://hub.qgis.org/projects/quantum-gis/wiki/

· QGIS FAQ

   http://hub.qgis.org/projects/quantum-gis/wiki/How_do_I_do_that_in_QGIS

misc: basics

◇ need all gis (and other data), not just .shp

◇ quality v quantity

◇ interpret everything you show or drop it!

· (if it's not worth your discussion, why is it in the map?)

a tip of the week...

⋄ get yourself a hi-res screen (if you don't have one yet)

⋄ it immensely helps working with any research, especially gis

⋄ it's just 150$ or so

⋄ 2560 x 1080 or larger would do, say `https://www.newegg.com/Product/Product.aspx?Item=N82E16824025340`

⋄ what maters is $\#$ of pixels not so much size of the screen!

first thing: find data

· reliable?: always think how reliable is the source

◇ trust the govt, "major companies", universities, etc

◇ say US states; where do i get it?

◇ google "US states shapefile" and we get

◇ https://www.census.gov/geo/maps-data/data/
tiger-cart-boundary.html

◇ click 'State,' and get:

◇ https:
//www.census.gov/geo/maps-data/data/cbf/cbf_state.html

saving and unzipping

◇ save link as 'cb_2016_us_state_20m.zip'

· and save say into /Downloads/= Home Folder/Downloads

· then open that location using file explorer (file cabinet icon at bottom left):

· Home Folder/Downloads

· right click and "Extract Here"

· you'll see a bunch of files–they key one is .shp

· keep them **all with same name in same location**–otherwhise it won't work!

adding data

◇ click first icon on second toolbar "3 squares with $+$"

· to open Data Source Manager

· and click first icon on the left toolbar "line with nodes" for vector data

· ("checkboard" is for raster/pictures (later))

· and we got the map in the middle

· it also appears in Layers panel on the left

◇ NOTE: can also grab zipped folder from file explorer/cabinet

· and drop into map window of qgis

· but sometimes need to unzip/extract first

· and it shows you what's inside

zooming, identifying

· grab it and move around with "hand" pointer

◇ can zoom in and out

· either click the map with appropriate tool

· better yet, draw a rectangle to achieve appropriate zoom

◇ once zoomed in, let's identify features

· select tool "arrow with 'i'" -'i' for info/identify

· click on some polygon, say TX and it'll pop up information

◇ a useful thing is to right click on layer and do "zoom to layer"

underlying data

◇ there is always a table (database) underlying a map

◇ right-click on the layer in left panel ,or from top menu:
  Layer:

· "Open Attribute Table"

◇ now, let's make a selection: highlight some rows in the table

· or do it in the map: "arrow with rectangle": Select
  Features by Area or single click
  –either click or draw a rectangle

· to deselect use "rectangle with 'no' sign"

loading more data

◇ click and Save File `https://docs.google.com/uc?id=1xJDhcRCkgv7k4tNCa72Oog5bohV6dTB2&export=download`

· then can just hit blue download arrow at top right in firefox

· click folder to fire up file explorer

· and drag over the zipped file into qgis map window

· there were 3 shapefiles inside and now have 3 additioonal layers

play around

◇ move layers up and down

◇ turn on the layers and off (check tick)

◇ right click and see the data (table)

· remember i was saying there is always data under the map?

your first thematic map

◇ thematic maps are the key thing in this class (thematic.pdf)

◇ nj counties-Properties-Symbology and from drop-down: "Graduated"

◇ Column: "POP2010"

◇ Color ramp: can just leave Reds

◇ and hit "Classify" button

◇ many ways to do the classification: more soon

· if you're curious–just poke around with classifications

· easy to experiment and figure things out there

◇ and hit "OK" to see the map–viola!

export to pdf

◇ make sure map is centered:

· nj counties-Zoom to Layer

◇ Project-Import/Export-Export map to PDF