



### Options with the syntax command

- Another type of input are options, e.g.  
`reg income age sex if country == "France", vce(cluster district)`
- The **syntax** command allows you to program your own options, e.g.  
`syntax varlist(min=1) [if] [in], vce(namelist)`
- You can specify options to be mandatory (no brackets) or optional (squared brackets)
- You can define abbreviations (abbreviation in caps)
- You can have options which are only words (e.g. **replace**) and options which require input (e.g. **vce**)
- For the latter, an input type is needed (varlist, numlist etc.) which can be amended by constraints (numeric, min/max etc.)

### Options with the syntax command

accepts no argument (there is nothing between syntax and the comma except for if/in/using)

“in” optional, stores the phrase in local ``in'` **without** the word “in”

**allows** the option `root` with an integer, otherwise takes the integer 2 as default, and stores the input in the local ``root'`

`syntax [if] [in/], RUNning(varlist numeric) [root(integer 2)]`

“if” optional, stores the phrase in local ``if'` **with** the word “if”

**requires** the option `running` (abbrev. `run`), but only with numeric variables, and stores the input in the local ``running'`



### More helpful options and commands

- Program options
  - The **byable** option lets the program accept the **by** prefix
  - The **sortpreserve** option tells Stata to restore the previous sorting after the program ends
- Remember that **quietly** suppresses the Stata output but still stores the results in `r()` etc. if applicable



### A remark on error messages

- The `syntax` command comes with its own error messages for misspecification of the program syntax
- However, it might be useful to write your own error messages or warnings to prevent mistakes
- We have done this before using `display` and `exit`, but you can also include the pre-defined error codes using `error`
- To have the output printed red, type `display in red`