User Guide – Using the IHE Color Palette in STATA

This guide is designed to help you access and utilize the IHE color palette within STATA. The IHE color palette enhances the visual consistency of your graphs and charts, promoting a unified and professional appearance.

Step 1: Verify Your STATA Version

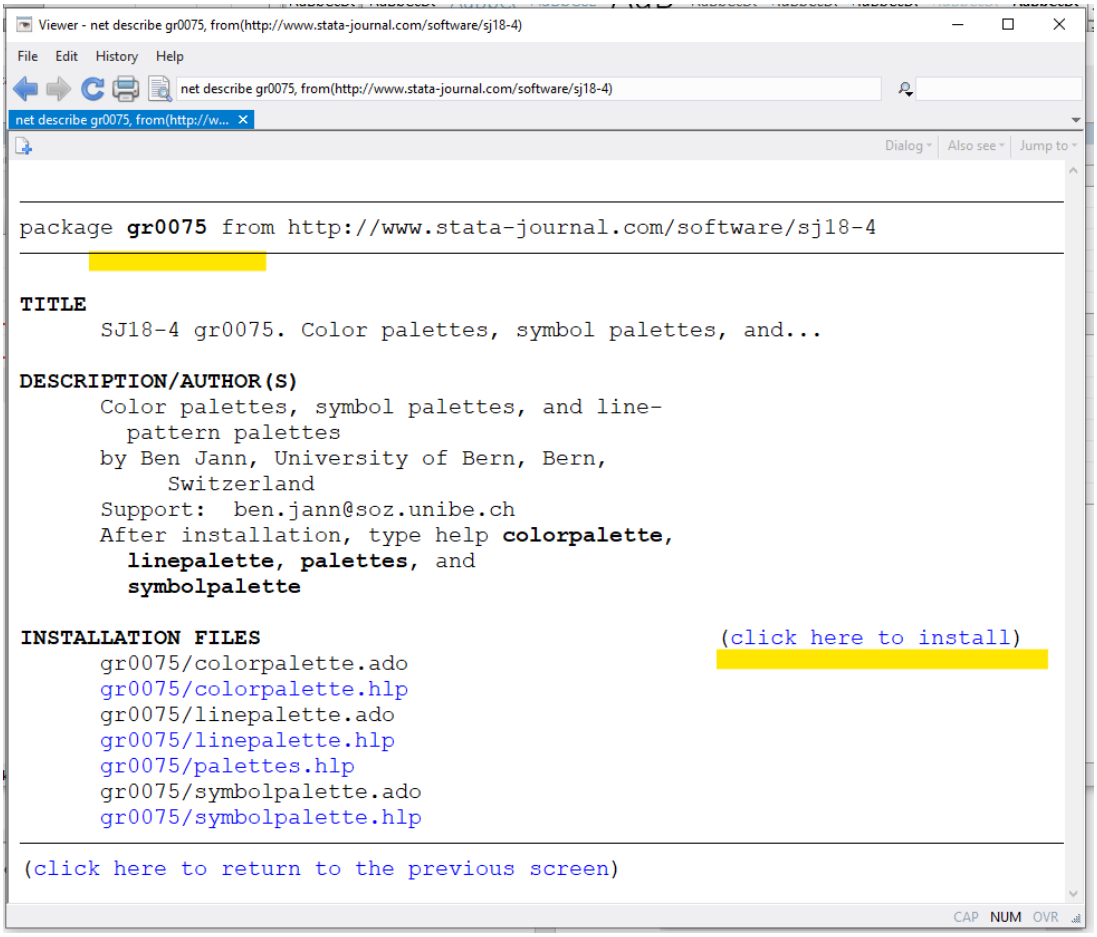
Ensure that you are using the latest version of STATA (14.2 or higher) to guarantee compatibility with the IHE color palette.

Step 2: Install Required Packages

Two essential packages, **gr0075** and **ColrSpace**, need to be installed to enable the IHE color palette.

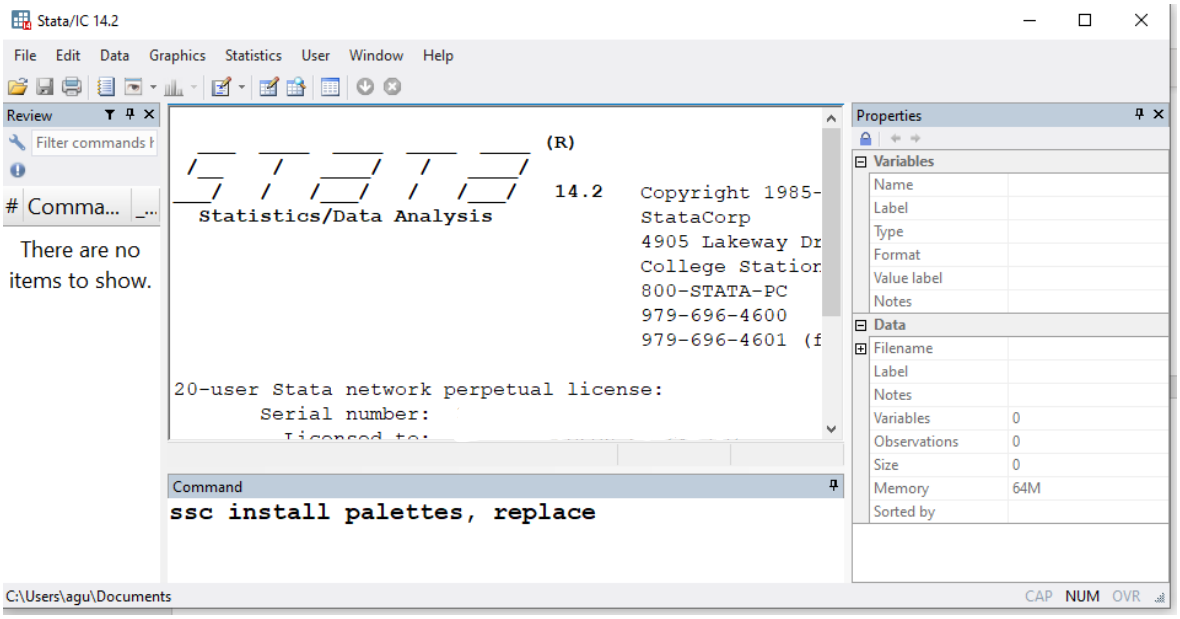
A) Install gr0075 Package

1. Open STATA.
2. In the command window, use the search function: **search gr0075**.
3. Locate the **gr0075** package and click on the "Install" button (see picture below).
4. This package is crucial for color customization.



B) Install ColrSpace Package

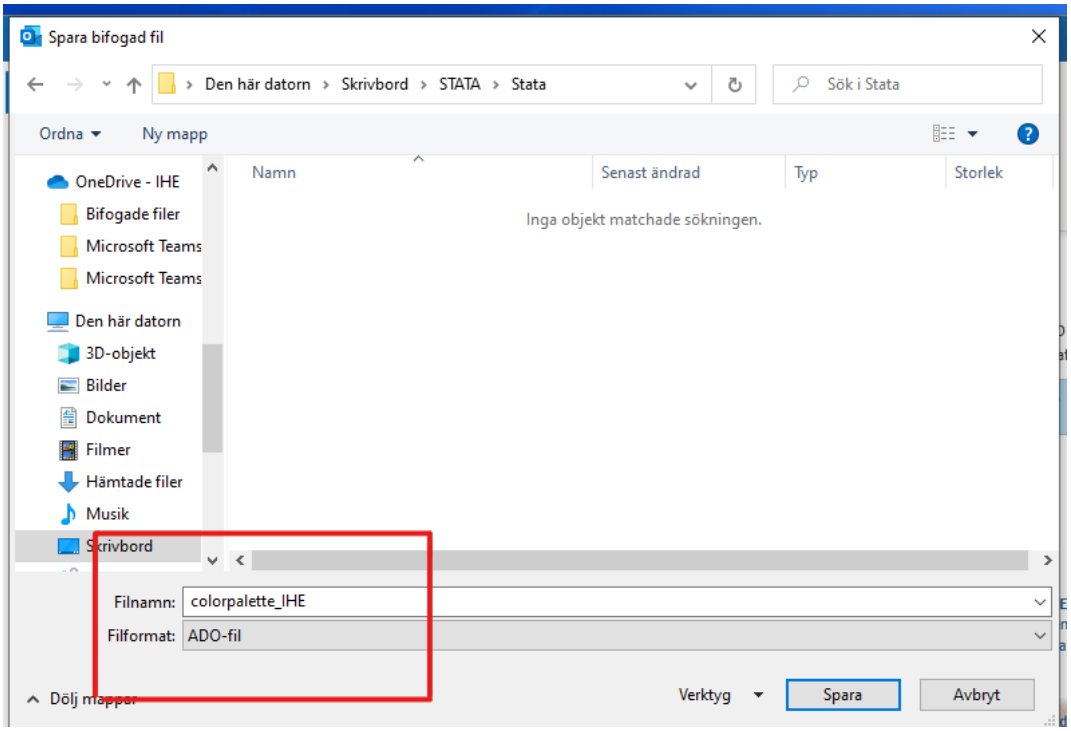
1. In the command window, type:
   - **ssc install palettes, replace**.



2. This installs the **ColrSpace** package, which is necessary for advanced color manipulation.

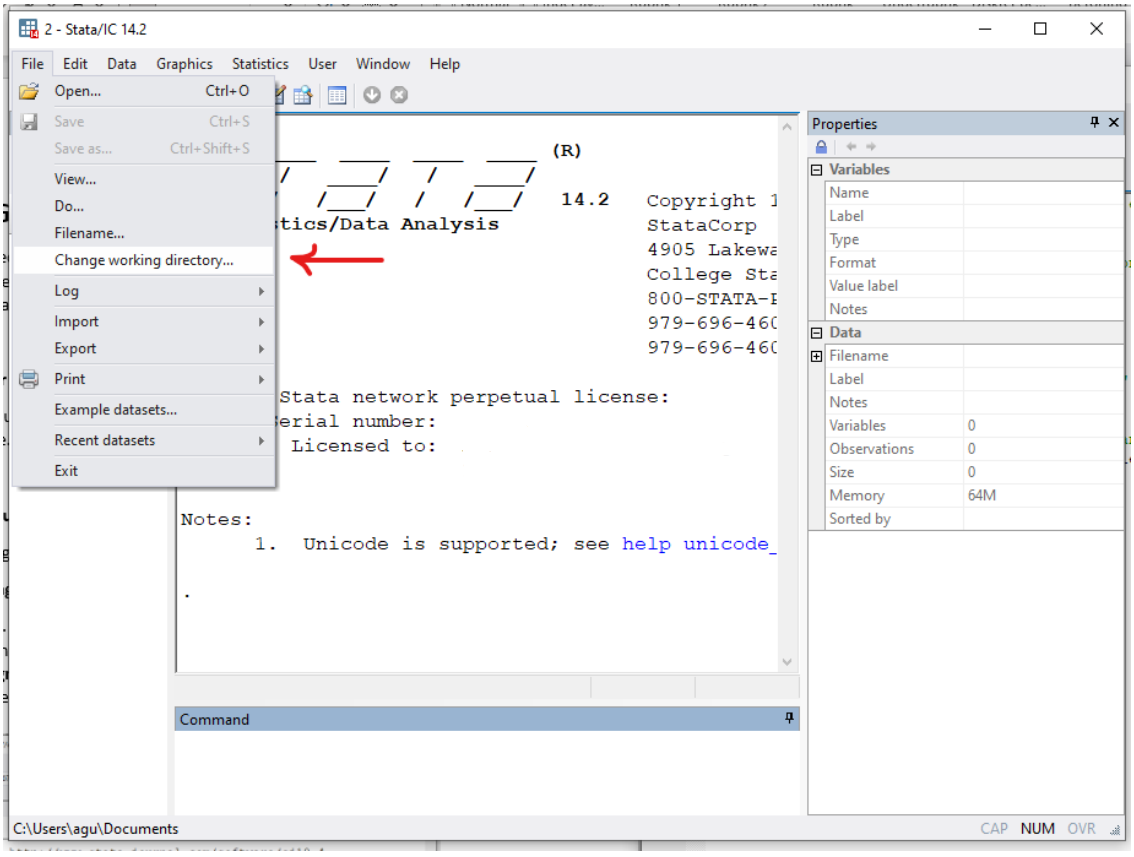
Step 3: Download colorpalette_IHE.ado File

1. Download the **colorpalette_IHE.ado** file from the IHE GitHub page
2. Save it in your STATA working directory
3. Make sure that the file is save with the name ***colorpalette_IHE*** and as a ***.ado*** file



Step 4: Set Your Working Directory

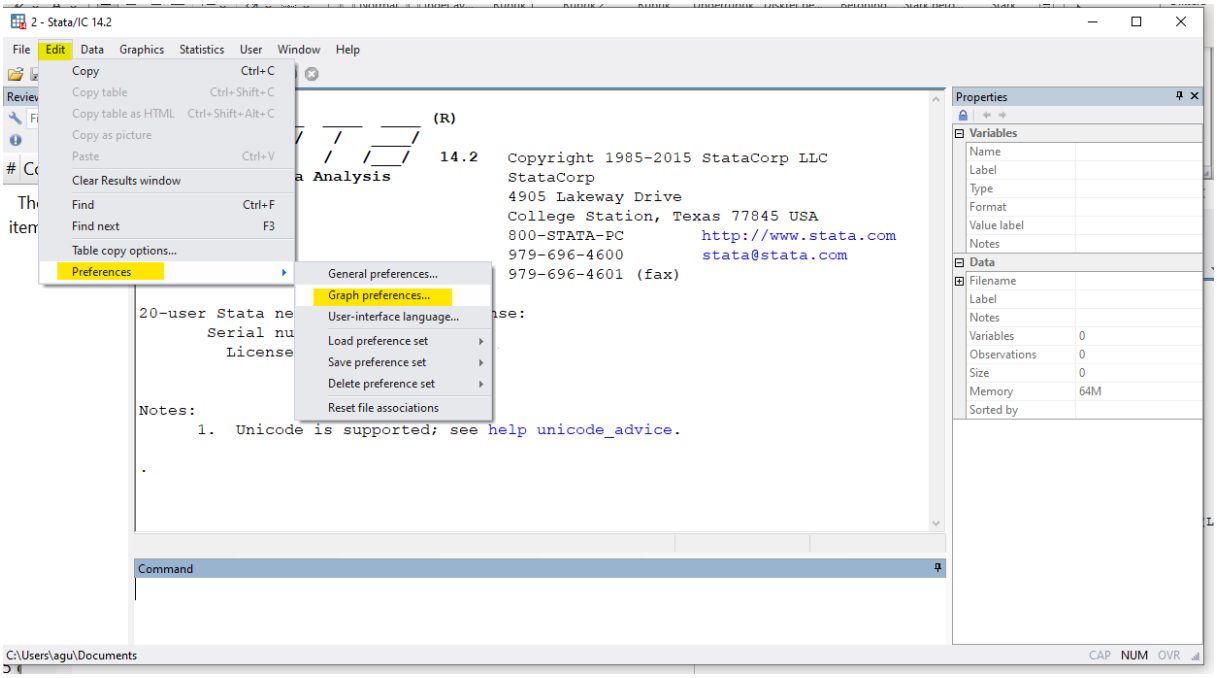
Ensure that your STATA working directory is correctly set to the location where the **colorpalette_IHE.ado** file is saved. This is essential for STATA to locate and access the palette file.



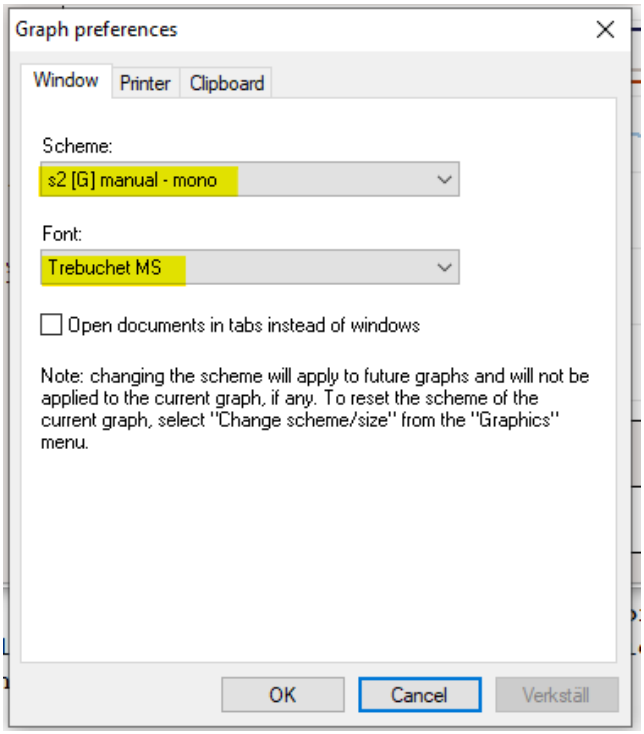
Step 5. Change graph scheme and font

In the Stata window,

1. Click on Edit → Preferences → Graph preferences



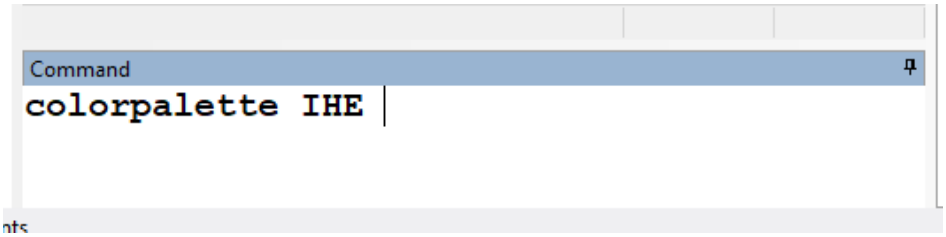
2. In the list of schemes, select **s2 [G] manual - mono**
3. In the list of fonts, select **Trebuchet MS**



Step 5: Implement the IHE Color Palette

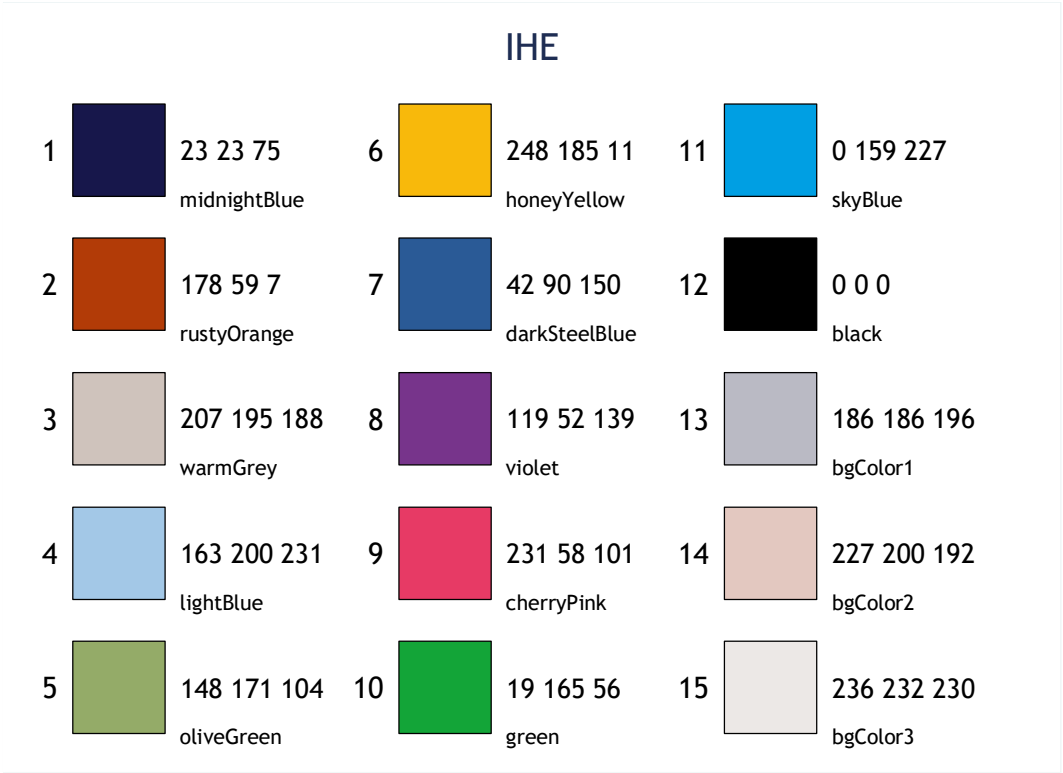
In STATA's command window:

1. Type the following command to implement the IHE color palette:



- This command activates the IHE color palette for your graphs.

2. Upon executing the command, you will receive an output indicating that the palette has been successfully applied (see picture below).



Additional Notes

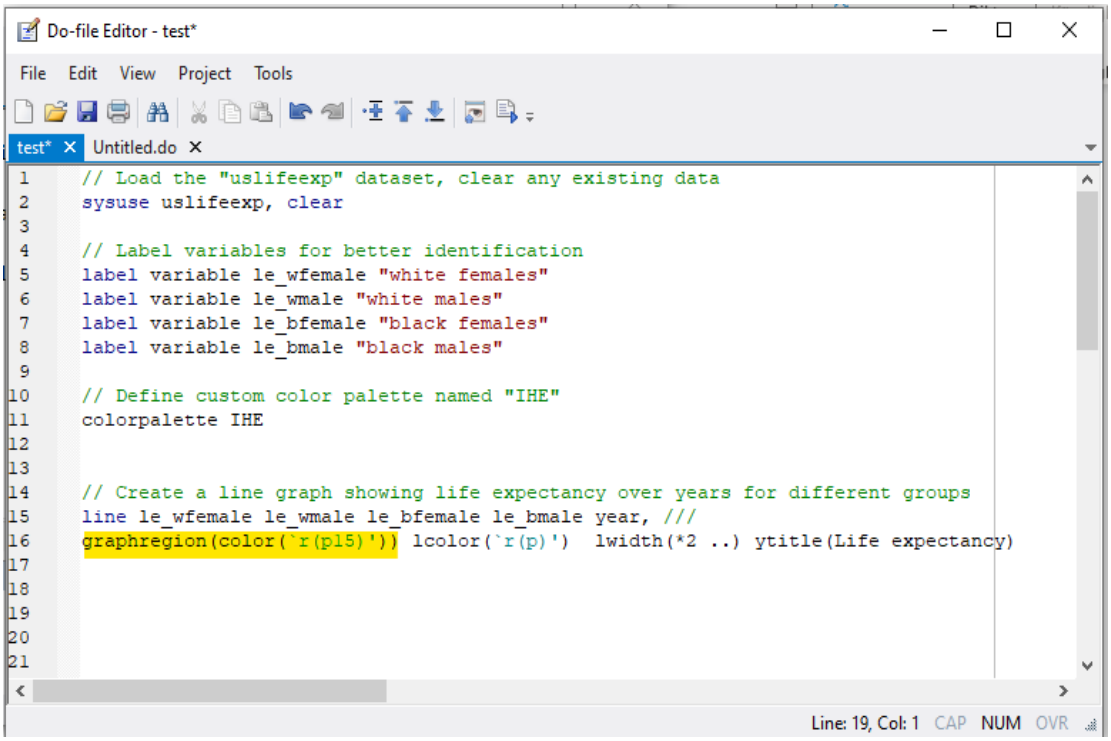
- Before creating a graph, **you need to write colorpalette IHE** in the commando window
- Below are some examples on how to use the palette in your graphs

Examples on how to use IHE color palette

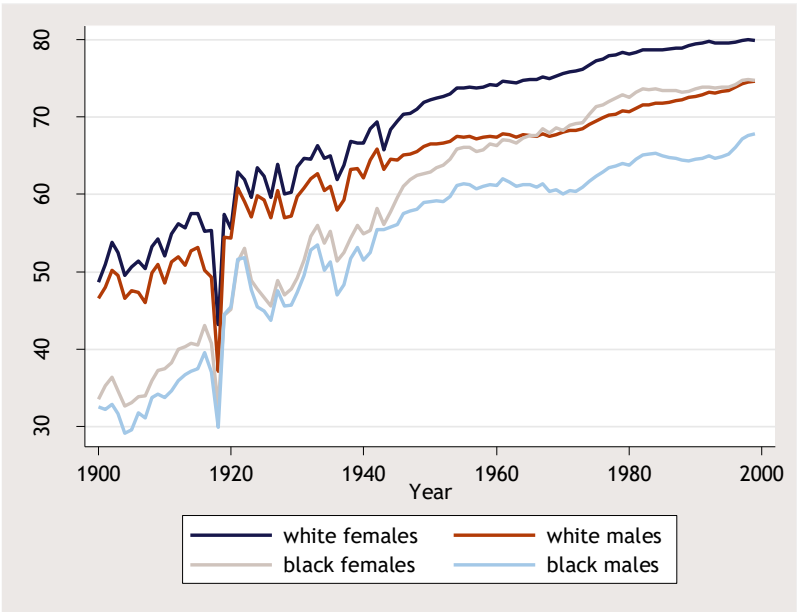
Example 1. Creating a line graph showing life expectancy

A. *Code creating line graph*

- Note that you need to define the background color by adding this line to your graph: **graphregion(color(`r(p15)'))**
- Line color automatically selected from IHE color palette by adding this line to your graph: **lcolor(`r(p)')**



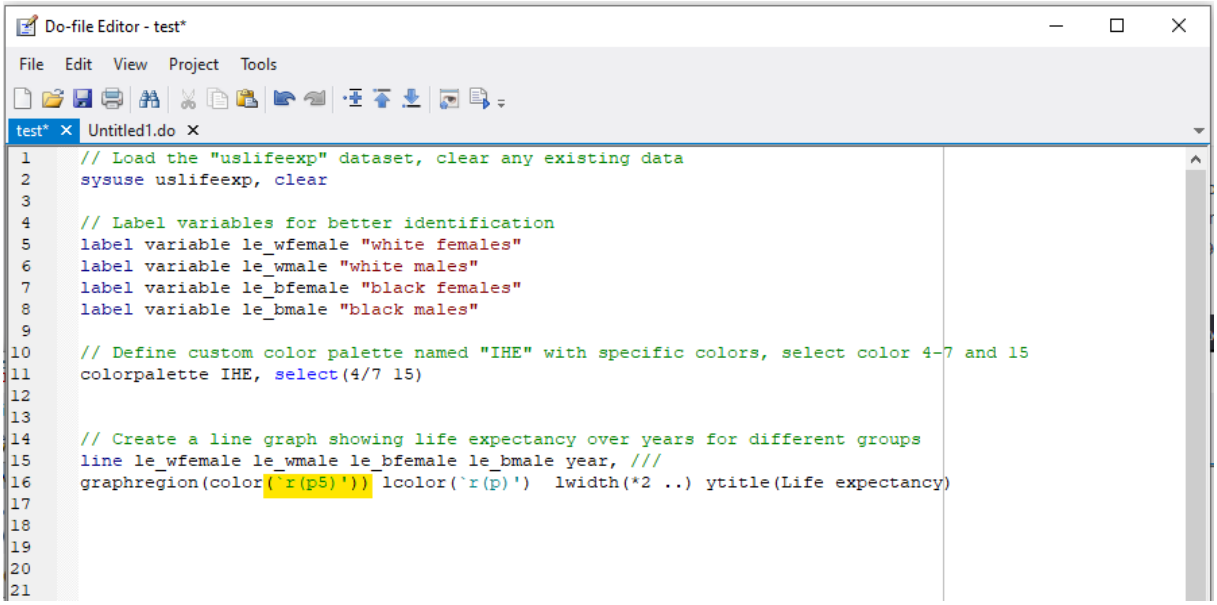
B. *Output*



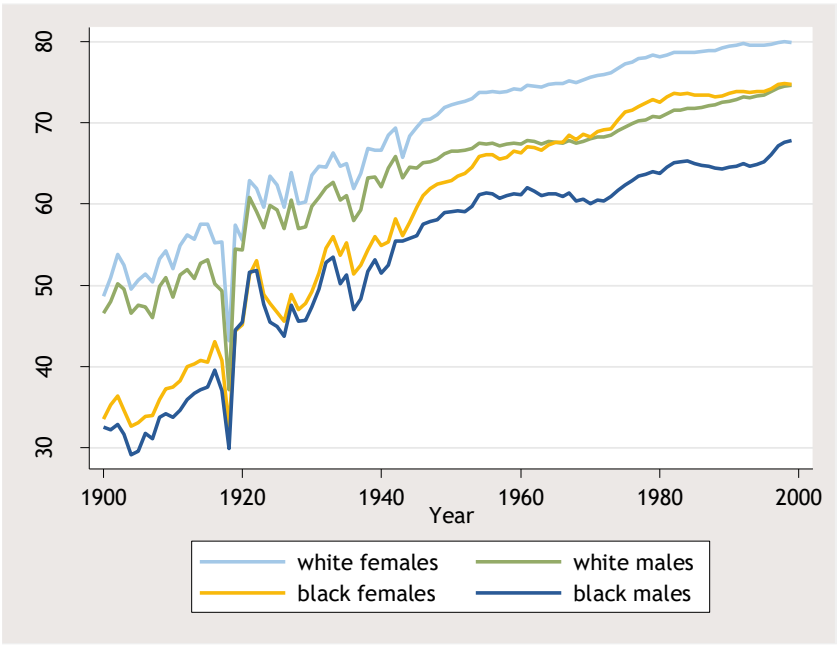
Example 2. Select colors manually

If you want to manually select colors, you can use the option select.

A. *Code selecting the colors 4-7 and 15.*
   - Note that the background color (previously number 15) **is now number 5** in the selected palette (the last of the five colors selected).



B. *Output*



Example 3. Creating a bar chart showing life expectancy in 1980

A. Code creating a bar chart

Do-file Editor - test*

File Edit View Project Tools

test* Untitled1.do

```
21
22
23    // Load the "uslifeexp" dataset, clear any existing data
24    sysuse uslifeexp, clear
25
26    // Label variables for better identification
27    label variable le_wfemale "white females"
28    label variable le_wmale "white males"
29    label variable le_bfemale "black females"
30    label variable le_bmale "black males"
31
32    // Define custom color palette named "IHE" with specific colors
33    colorpalette IHE
34
35
36    // Create a bar chart showing life expectancy for the year 1980
37    graph bar (mean) le_wfemale le_wmale le_bfemale le_bmale if year == 1980, ///
38        over(year, sort(1)) ///
39        bar(1, color(`r(p1)') lcolor(`r(p1)')) ///
40        bar(2, color(`r(p2)') lcolor(`r(p2)')) ///
41        bar(3, color(`r(p3)') lcolor(`r(p3)')) ///
42        bar(4, color(`r(p4)') lcolor(`r(p4)')) ///
43        graphregion(color(`r(p15)')) ///
44        ytitle("Mean Life Expectancy") ///
45        title("Life Expectancy in 1980 by Gender and Race") ///
46        legend(order(1 "White Females" 2 "White Males" 3 "Black Females" 4 "Black Males"))
47
48
49
```

B. Output