

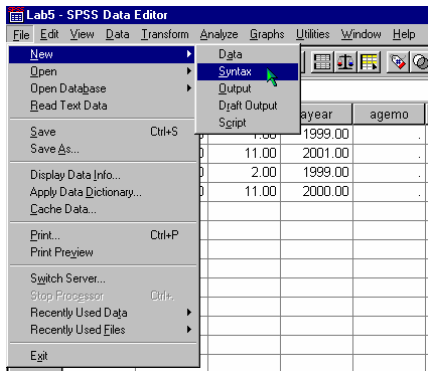
Psychology 310
Lab 6
Further Data Manipulation using *SPSS* Syntax

This lab is designed to give you further practice in using *SPSS* command syntax to manipulate data. Begin by opening the data file, Lab6.sav, you downloaded from the course web site. This file contains the year and month of birth of a group of participants (“byear” and “bmo”), and the year and month that they participated in an experiment (“ayear” and “amo”). Suppose that after the fact, you decide you want to estimate their age, at the start of the experiment, in years and months, AND in decimal years.

If the month the experiment starts in is later in the year than the month of birth, then the age in years and months can be obtained simply by subtraction. So, for example, if the person is born in the first month of 1944, and participates in the experiment in the 3rd month of 1999, then one can obtain the year component of the age by subtracting 1944 from 1999, and the month component by subtracting 1 from 3, thus yielding an age of 55 years and 2 months.

However, suppose that the birth year and start year are the same as above, but that the month of birth of the individual is 3 and the month at the start of participation is 1. Now, one must perform the calculation by adding 12 months to the start month, and subtracting one year from the start year to compensate. Specifically, the month component of age is now $1+12-3=10$, and the age component is $1999-1-1944=54$. That is, the person is 54 years and 10 months at the beginning of the experiment.

The syntax provided below will accomplish this goal. Start by opening up a syntax window in *SPSS* by selecting *File* → *New* → *Syntax*.



Now type in the following syntax. NOTE: Do not type in the bolded information enclosed in braces { } – it is there to explain what each part of the syntax does.

DO IF NOT(MISSING(AMO) OR MISSING(BMO) OR MISSING(AYEAR) OR MISSING(BYEAR)).

{This tells SPSS to consider the following syntax for each case for whom there are data on the year and month of birth, and the year and month of participation in the experiment.}

COMPUTE AGEYR = AYEAR - BYEAR.

{This computes the year component of each person's age.}

```
DO IF (amo GE bmo).  
    COMPUTE AGEMO = AMO-BMO.
```

{For each individual whose month of participation was in the same month or later in the year than his or her birth month (GE means "greater than or equal to"), this computes the month component of his or her age.}

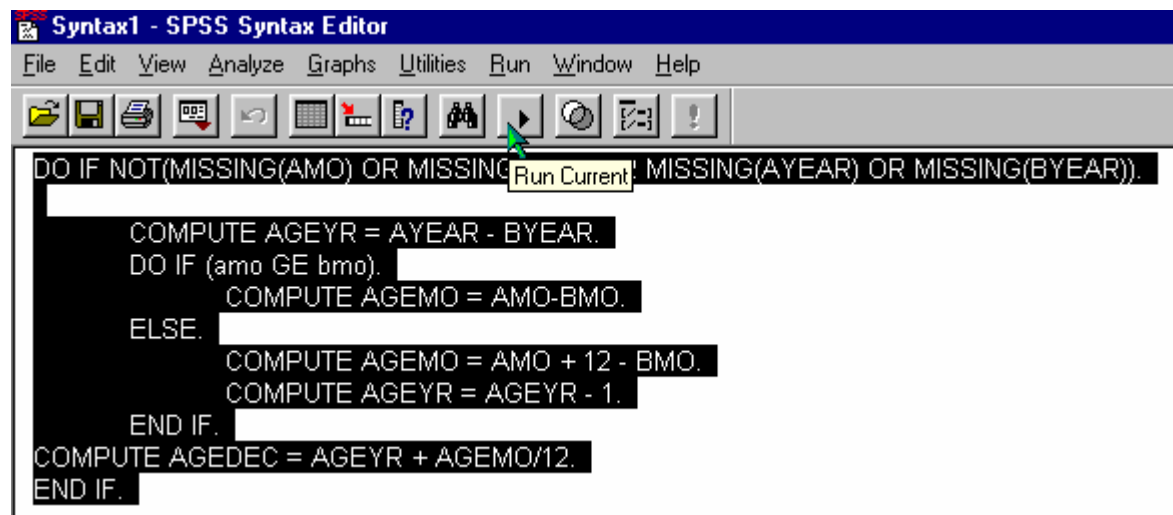
```
ELSE.  
    COMPUTE AGEMO = AMO + 12 - BMO.  
    COMPUTE AGEYR = AGEYR - 1.  
END IF.
```

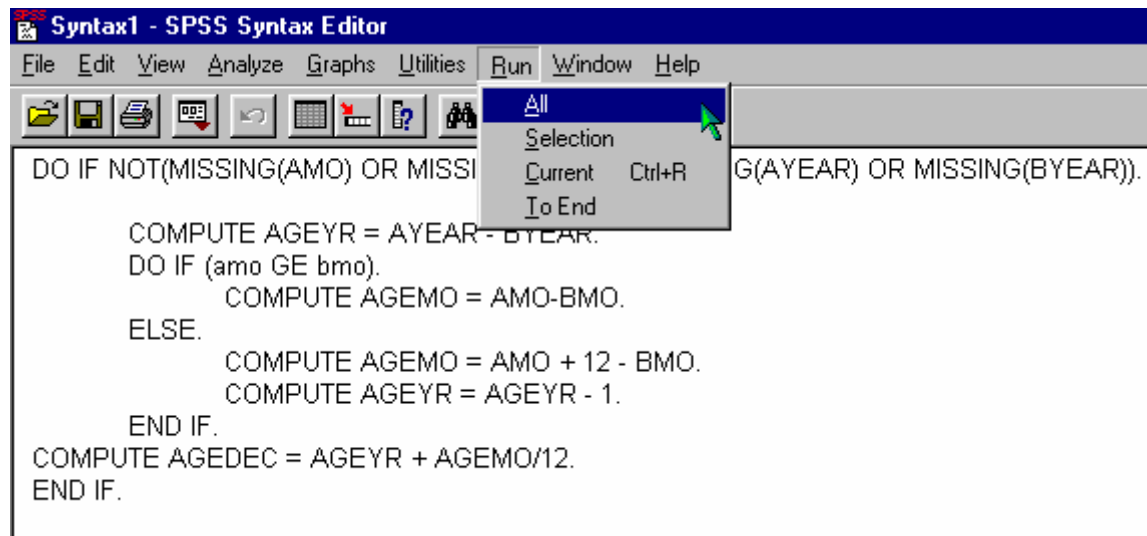
{For each individual whose month of participation was earlier in the year than his or her birth month, this computes the month component of his or her age and adjusts the year component accordingly.}

```
COMPUTE AGEDEC = AGEYR + AGEMO/12.  
END IF.
```

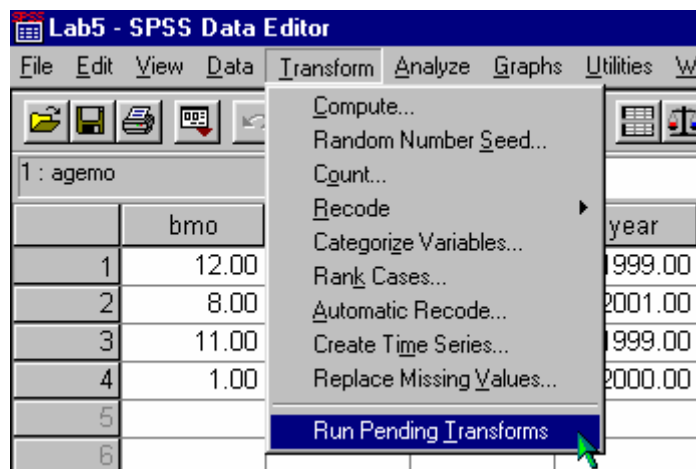
{This computes each person's age in decimal years.}

Now run the syntax by highlighting it and clicking on the *Play* button or selecting *Run* → *All*.





Then return to the *SPSS DataEditor* window and select *Transform* → *Run Pending Transformations*.



HAND IN: Your syntax and data files.