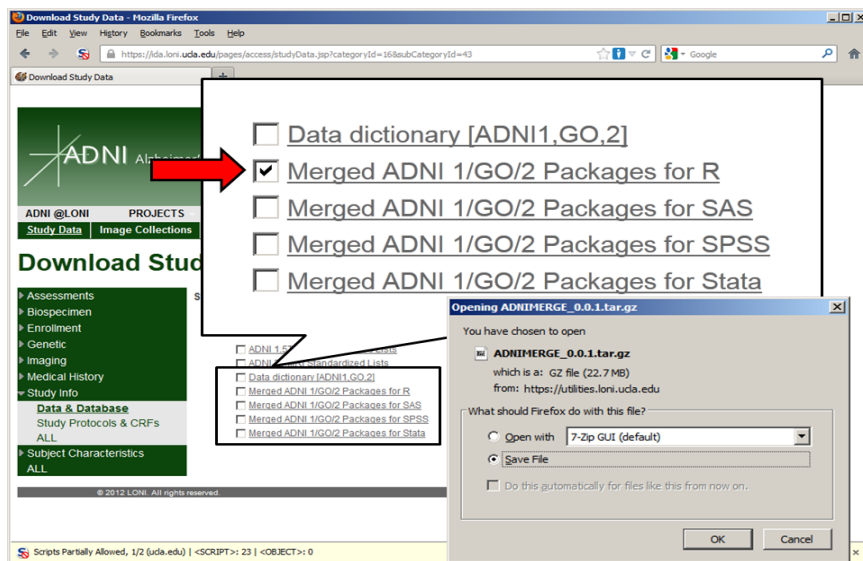


## How to use ADNI Merge Packages in Windows

- R version:

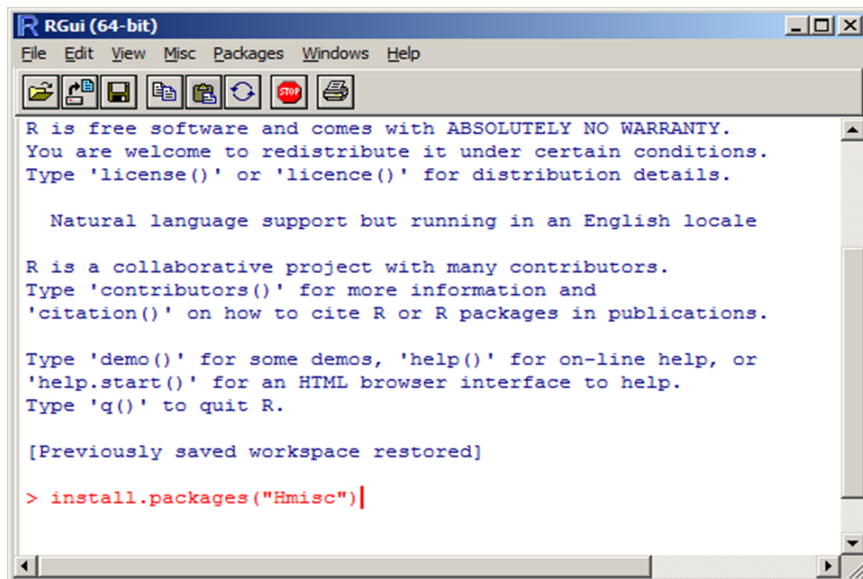
1. Download ADNIMERGE\_0.0.1.tar.gz from LONI.



2. Open R.

3. Install Hmisc package to your computer if it is not installed already.

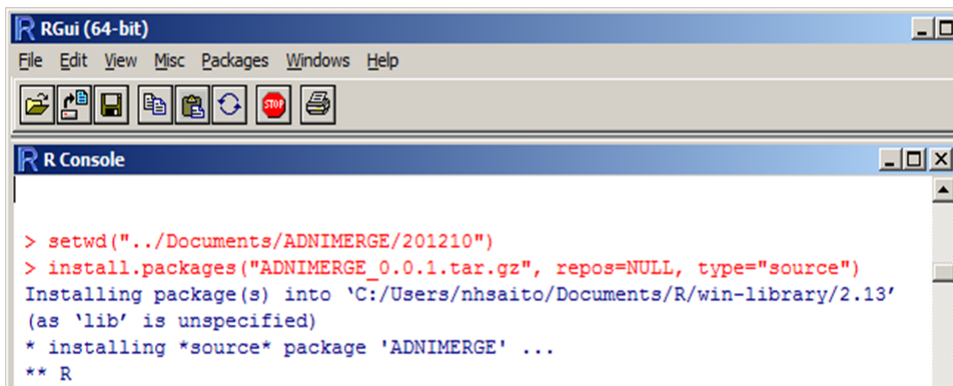
```
install.packages("Hmisc")
```



## How to use ADNI Merge Packages in Windows

4. Install the ADNIMERGE package you have downloaded at Step 1.

```
install.packages("../your path/ADNIMERGE_0.0.1.tar.gz", repos=NULL, type="source")
```

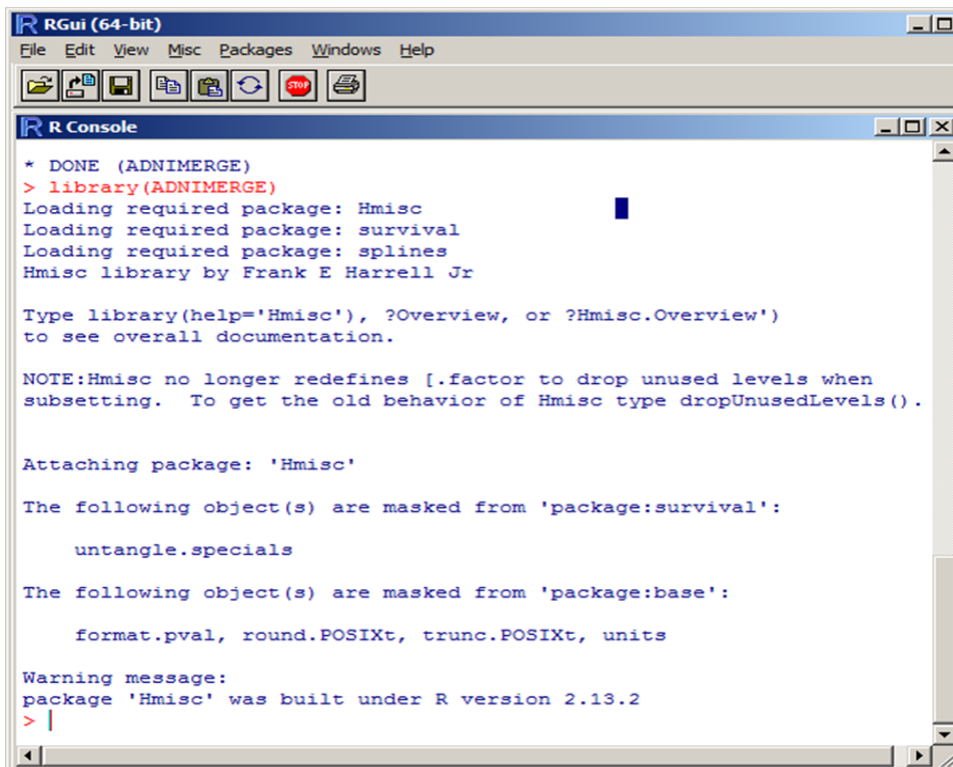


The screenshot shows the RGui (64-bit) interface. The R Console window displays the following text:

```
> setwd("../Documents/ADNIMERGE/201210")
> install.packages("ADNIMERGE_0.0.1.tar.gz", repos=NULL, type="source")
Installing package(s) into 'C:/Users/nhsaito/Documents/R/win-library/2.13'
(as 'lib' is unspecified)
* installing *source* package 'ADNIMERGE' ...
** R
```

5. To load the ADNIMERGE package.

```
library(ADNIMERGE)
```



The screenshot shows the RGui (64-bit) interface. The R Console window displays the following text:

```
* DONE (ADNIMERGE)
> library(ADNIMERGE)
Loading required package: Hmisc
Loading required package: survival
Loading required package: splines
Hmisc library by Frank E Harrell Jr

Type library(help='Hmisc'), ?Overview, or ?Hmisc.Overview)
to see overall documentation.

NOTE:Hmisc no longer redefines [.factor to drop unused levels when
subsetting. To get the old behavior of Hmisc type dropUnusedLevels().

Attaching package: 'Hmisc'

The following object(s) are masked from 'package:survival':

    untangle.specials

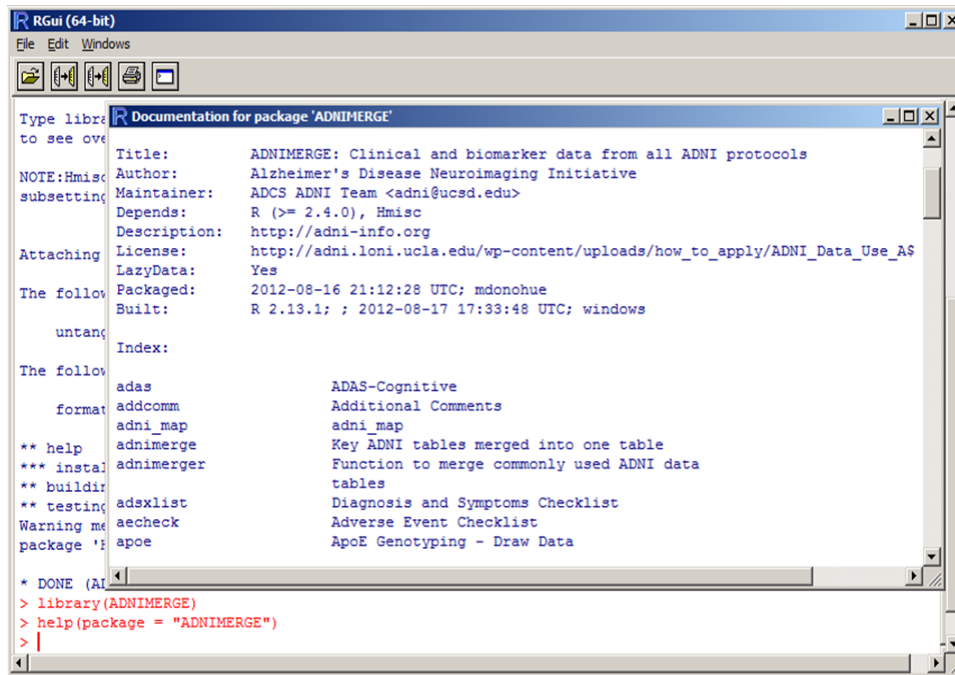
The following object(s) are masked from 'package:base':

    format.pval, round.POSIXt, trunc.POSIXt, units

Warning message:
package 'Hmisc' was built under R version 2.13.2
> |
```

## How to use ADNI Merge Packages in Windows

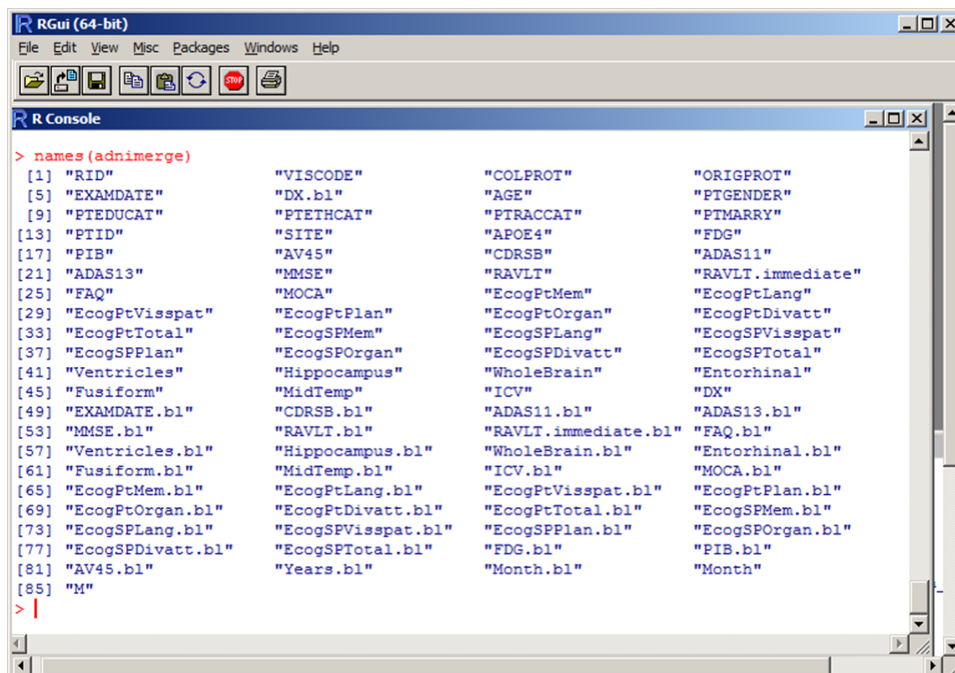
- To see the documentation, `help(package="ADNIMERGE")`.



```
RGui (64-bit)
File Edit Windows
Type libr: R Documentation for package 'ADNIMERGE'
to see ove
NOTE:Hmisc
subsetting
Title: ADNIMERGE: Clinical and biomarker data from all ADNI protocols
Author: Alzheimer's Disease Neuroimaging Initiative
Maintainer: ADCS ADNI Team <adni@ucsd.edu>
Depends: R (>= 2.4.0), Hmisc
Description: http://adni-info.org
License: http://adni.loni.ucla.edu/wp-content/uploads/how_to_apply/ADNI_Data_Use_A$
LazyData: Yes
The follow: Packaged: 2012-08-16 21:12:28 UTC; mdonohue
          Built: R 2.13.1; ; 2012-08-17 17:33:48 UTC; windows
untan(
The follow
format
  adas          ADAS-Cognitive
  addcomm      Additional Comments
  adni_map     adni_map
  adnimerge    Key ADNI tables merged into one table
  adnimerger   Function to merge commonly used ADNI data
** help
*** instal
** buildir
** testin(
Warning me
package '!
  adxlist      Diagnosis and Symptoms Checklist
  aeccheck     Adverse Event Checklist
  apoe         ApoE Genotyping - Draw Data
* DONE (A
> library(ADNIMERGE)
> help(package = "ADNIMERGE")
> |
```

### 6. ADNIMERGE package contains all ADNI data, so you can start working with them.

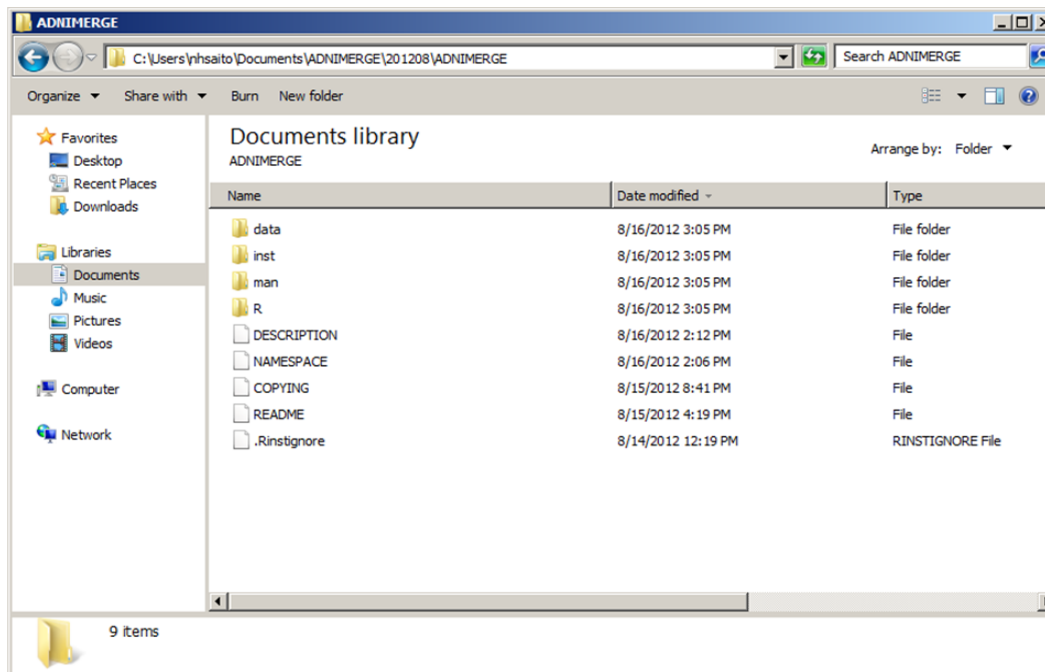
- One of the dataframes is `adnimerge` which contains commonly used variables. (i.e. demographics, clinical exam, MRI and PET as shown below)



```
RGui (64-bit)
File Edit View Misc Packages Windows Help
R Console
> names(adnimerge)
 [1] "RID" "VISCODE" "COLPROT" "ORIGPROT"
 [5] "EXAMDATE" "DX.b1" "AGE" "PTGENDER"
 [9] "PTEDUCAT" "PTETHCAT" "PTRACCAT" "PTMARRY"
[13] "PTID" "SITE" "APOE4" "FDG"
[17] "PIB" "AV45" "CDRSB" "ADAS11"
[21] "ADAS13" "MMSE" "RAVLT" "RAVLT.immediate"
[25] "FAQ" "MOCA" "EcogPtMem" "EcogPtLang"
[29] "EcogPtVisspat" "EcogPtPlan" "EcogPtOrgan" "EcogPtDivatt"
[33] "EcogPtTotal" "EcogSPMem" "EcogSPLang" "EcogSPVisspat"
[37] "EcogSPPlan" "EcogSPOrgan" "EcogSPDivatt" "EcogSPTotal"
[41] "Ventricles" "Hippocampus" "WholeBrain" "Entorhinal"
[45] "Fusiform" "MidTemp" "ICV" "DX"
[49] "EXAMDATE.b1" "CDRSB.b1" "ADAS11.b1" "ADAS13.b1"
[53] "MMSE.b1" "RAVLT.b1" "RAVLT.immediate.b1" "FAQ.b1"
[57] "Ventricles.b1" "Hippocampus.b1" "WholeBrain.b1" "Entorhinal.b1"
[61] "Fusiform.b1" "MidTemp.b1" "ICV.b1" "MOCA.b1"
[65] "EcogPtMem.b1" "EcogPtLang.b1" "EcogPtVisspat.b1" "EcogPtPlan.b1"
[69] "EcogPtOrgan.b1" "EcogPtDivatt.b1" "EcogPtTotal.b1" "EcogSPMem.b1"
[73] "EcogSPLang.b1" "EcogSPVisspat.b1" "EcogSPPlan.b1" "EcogSPOrgan.b1"
[77] "EcogSPDivatt.b1" "EcogSPTotal.b1" "FDG.b1" "PIB.b1"
[81] "AV45.b1" "Years.b1" "Month.b1" "Month"
[85] "M"
> |
```

## How to use ADNI Merge Packages in Windows

- From Windows Explorer, you can open/extract ADNIMERGE\_0.0.1.tar.gz file using 7-zip (7-zip is an open source file archiver designed for Windows.)

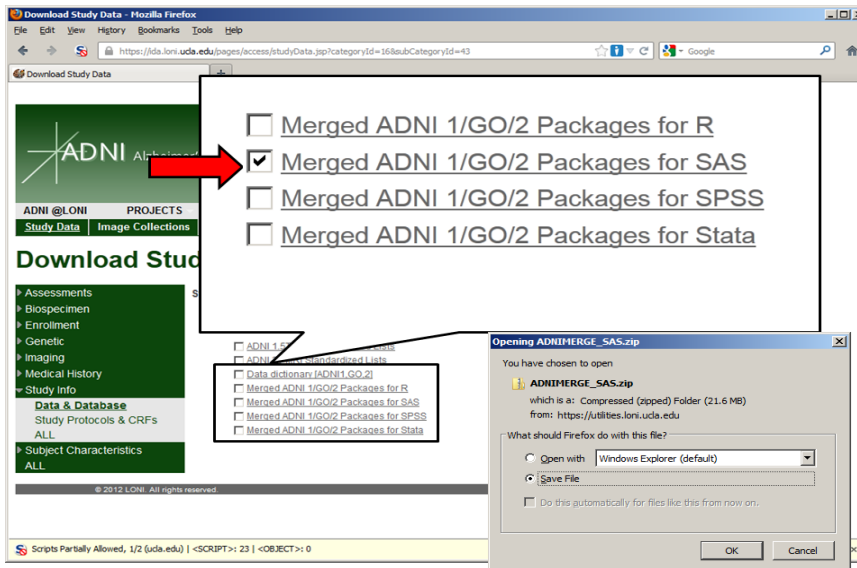


- You see data, inst, man, R folders; inst folder contains useful examples.
- README file contains instructions on how to use the package.

## How to use ADNI Merge Packages in Windows

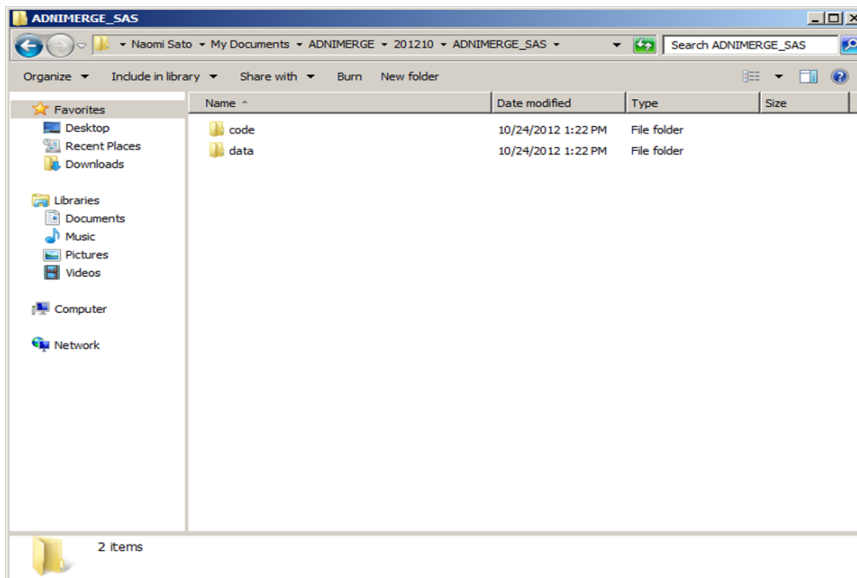
- SAS version:

1. Download ADNIMERGE\_SAS.zip from LONI.



2. Extract ADNIMERGE\_SAS.zip file.

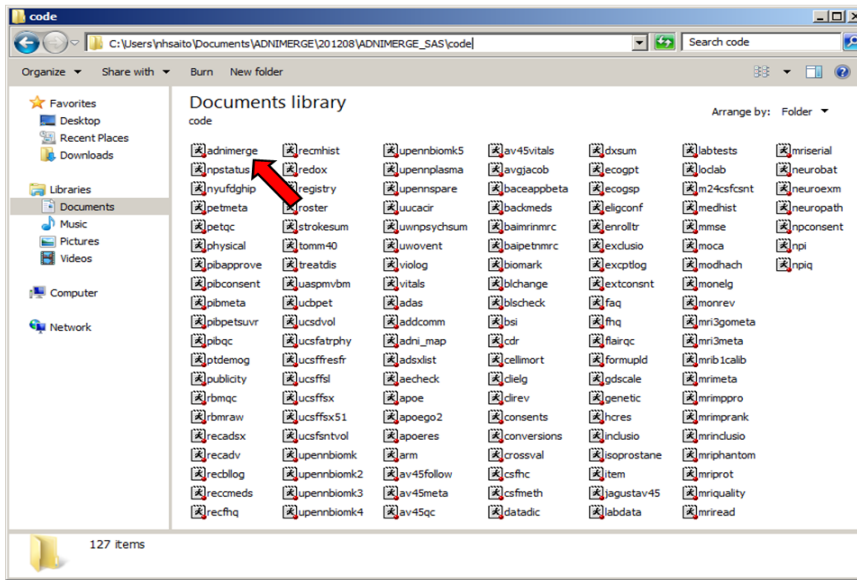
3. Under ADNIMERGE\_SAS folder, you will find a code folder and data folder.



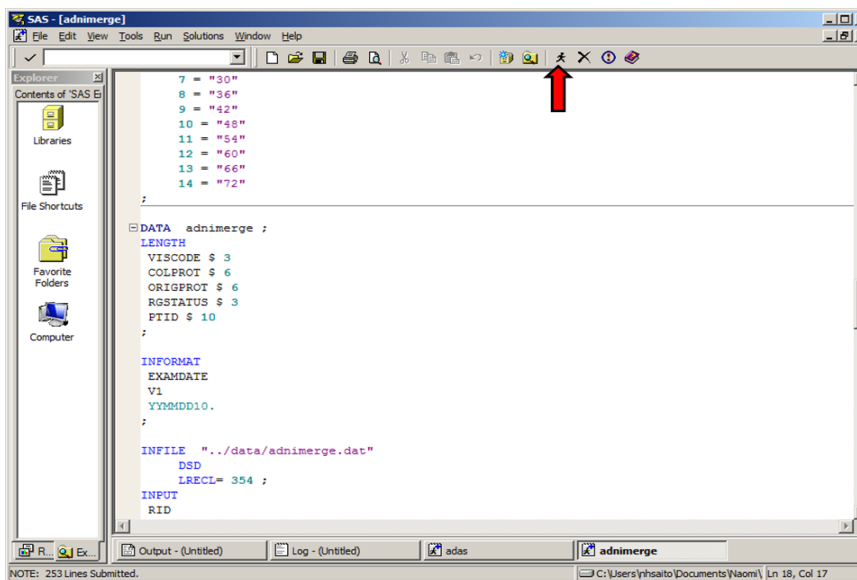
## How to use ADNI Merge Packages in Windows

4. In the code folder, there are more than 120 SAS programs.

- For example, we can open `adnimerge.sas`.
  - \* The simplest method is to double-click on `adnimerge.sas`.
  - \* This initiates SAS and opens the programming file
  - \* This also sets the working directory under the `code` folder.



- You can Run the program.  
Because we set the working directory under the `code` folder, the program can call the data file correctly.



- SAS will create data called `adnimerge` under SAS's Work library.
- This data (`adnimerge`) contains commonly used variables. (i.e. demographics, clinical exam, MRI and PET)

## How to use ADNI Merge Packages in Windows

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- SPSS version:

1. Download ADNIMERGE\_SPSS.zip from LONI.
2. ExtractADNIMERGE\_SPSS.zip file.
3. Under the ADNIMERGE\_SPSS file, you will find code folder and data folder.
4. In the code folder, there are more than 120 SPSS programs.

- STATA version:

1. Download ADNIMERGE\_Stata.zip from LONI.
2. Extract ADNIMERGE\_Stata.zip file.
3. Under the ADNIMERGE\_Stata file, you will find more than 120 STATA data files.
4. Date variables are NOT formatted in the ADNIMERGE\_Stata.  
(To format EXAMDATE, you can type at command line: `format EXAMDATE %d` )