

```
log using "D:\Jason\workshop\long format data\reshape and merge2.log", replace

*****
* Change the data from wide to long
*****
use "D:\Jason\workshop\long format data\reshape.dta", clear
list, sepby(family_id)

reshape long sex, i(family_id) j(pernum)
sort family_id pernum
list, sepby(family_id)

*remove records with missing values

drop if sex ==.

list, sepby(family_id)

save "D:\Jason\workshop\long format data\long format.dta", replace

*****
* Change the data from long to wide
*****

reshape wide sex, i(family_id) j(pernum)
list, sepby(family_id)
sort family_id
save "D:\Jason\workshop\long format data\wide format.dta", replace

*****
* Possible Error #1: mixed types of variables to be combined into one variable
*****

clear

use "D:\Jason\workshop\long format data\reshape1.dta", clear

des

reshape long sex, i(family_id) j(pernum)

destring sex8, replace

des

reshape long sex, i(family_id) j(pernum)
list, sepby(family_id)

*****
* Possible Error #2: the name of new variable has already been used
*****

use "D:\Jason\workshop\long format data\reshape2.dta", clear
des
reshape long sex, i(family_id) j(pernum)

rename sex sex8
label variable sex8 "sex8"

reshape long sex, i(family_id) j(pernum)

*****
* Possible Error #3: Variable names do not contain numerical values
*****

use "D:\Jason\workshop\long format data\reshape3.dta", clear
des
reshape long sex_, i(family_id) j(pernum)

rename sex_a sex_1
rename sex_b sex_2
rename sex_c sex_3
rename sex_d sex_4
rename sex_e sex_5
rename sex_f sex_6
```

```
rename sex_g sex_7  
rename sex_h sex_8
```

```
label variable sex_1 "sex_1"  
label variable sex_2 "sex_2"  
label variable sex_3 "sex_3"  
label variable sex_4 "sex_4"  
label variable sex_5 "sex_5"  
label variable sex_6 "sex_6"  
label variable sex_7 "sex_7"  
label variable sex_8 "sex_8"
```

```
reshape long sex_, i(family_id) j(pernum)
```

```
rename sex_ sex
```

```
*****  
* Merge data in long format with data in wide format  
*****
```

```
*****  
* look at the data file  
*****
```

```
use "D:\Jason\workshop\long format data\household_income.dta", clear  
list
```

```
use "D:\Jason\workshop\long format data\long format.dta", clear  
list
```

```
use "D:\Jason\workshop\long format data\wide format.dta", clear  
list
```

```
*****  
* Merging data: data in wide format to data in wide format  
*****
```

```
use "D:\Jason\workshop\long format data\household_income.dta", clear  
merge 1:1 family_id using "D:\Jason\workshop\long format data\wide format.dta"  
sort family_id  
list, sepby(family_id)  
save "D:\Jason\workshop\long format data\wide_wide.dta", replace
```

```
*****  
* Merging data: data in wide format to data in long format  
*****
```

```
use "D:\Jason\workshop\long format data\household_income.dta", clear  
merge 1:m family_id using "D:\Jason\workshop\long format data\long format.dta"  
sort family_id pernum  
list, sepby(family_id)  
save "D:\Jason\workshop\long format data\wide_long.dta", replace
```

```
*****  
* Merging data: data in long format to data in wide format  
*****
```

```
use "D:\Jason\workshop\long format data\long format.dta", clear  
merge m:1 family_id using "D:\Jason\workshop\long format data\household_income.dta"  
sort family_id pernum  
list, sepby(family_id)  
save "D:\Jason\workshop\long format data\long_wide.dta", replace
```

```
log close
```