

```

name: <unnamed>
log: F:\workshop\long format\family_relation_05_21_18.log
log type: text
opened on: 21 May 2018, 12:12:36

```

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.
.
. *****
. * Describe data
. *****
. use "F:\workshop\long format\family.dta", clear

. des

```

```

Contains data from F:\workshop\long format\family.dta
obs:          20
vars:          5          27 Feb 2017 10:21
size:         180

```

variable name	storage type	display format	value label	variable label
fam_id	long	%12.0g		family ID
pernum	byte	%8.0g		person number
relate	int	%34.0g	relate_lbl	Relationship to household head
age	byte	%19.0g	age_lbl	Age
sex	byte	%8.0g	sex_lbl	Sex

Sorted by:

```

. list, sepby(fam_id)

```

	fam_id	pernum	relate	age	sex
1.	18	1	Head/householder	41	Female
2.	18	2	Spouse	43	Male
3.	18	3	Child	13	Male
4.	18	4	Child	22	Female
5.	8212	1	Head/householder	44	Male
6.	8212	2	Spouse	50	Female
7.	8212	3	Child	13	Male
8.	8212	4	Child	18	Male
9.	8212	5	Child	19	Female
10.	8212	6	Child	22	Female
11.	8212	7	Child	23	Male
12.	8212	8	Parent	59	Female
13.	8212	9	Sibling	30	Female
14.	8212	10	Sibling	43	Male
15.	8212	11	Other relatives, n.s.	21	Female
16.	8212	12	Other relatives, n.s.	30	Male
17.	8212	13	Other relatives, n.s.	43	Female
18.	8212	14	Other relatives, n.s.	1	Male
19.	8212	15	Other relatives, n.s.	8	Male
20.	8212	16	Other relatives, n.s.	12	Female

```

.
.
. *****
. * Sort data
. *****
.
. sort fam_id pernum

.
. *****
. * Check whether each record is a unique one

```

```
. *****
```

```
. duplicates report fam_id pernum
```

```
Duplicates in terms of fam_id pernum
```

copies	observations	surplus
1	20	0

```
.
.
. *****
```

```
. * Create an indicator variable for each family member
```

```
. *****
```

```
. by fam_id: gen person_id = _n
```

```
. label variable person "indicator for each family member"
```

```
. *****
```

```
. *Calculate the size of family
```

```
. *****
```

```
. by fam_id: gen size = _N
```

```
. label variable size "family size"
```

```
.
.
. list, sepby(fam_id) nol
```

	fam_id	pernum	relate	age	sex	person~d	size
1.	18	1	101	41	2	1	4
2.	18	2	201	43	1	2	4
3.	18	3	301	13	1	3	4
4.	18	4	301	22	2	4	4
5.	8212	1	101	44	1	1	16
6.	8212	2	201	50	2	2	16
7.	8212	3	301	13	1	3	16
8.	8212	4	301	18	1	4	16
9.	8212	5	301	19	2	5	16
10.	8212	6	301	22	2	6	16
11.	8212	7	301	23	1	7	16
12.	8212	8	501	59	2	8	16
13.	8212	9	701	30	2	9	16
14.	8212	10	701	43	1	10	16
15.	8212	11	1001	21	2	11	16
16.	8212	12	1001	30	1	12	16
17.	8212	13	1001	43	2	13	16
18.	8212	14	1001	1	1	14	16
19.	8212	15	1001	8	1	15	16
20.	8212	16	1001	12	2	16	16

```
.
.
. *****
```

```
. * indicator of how many children householders had in the family
```

```
. *****
```

```
. by fam_id: gen kid = 1 if relate ==301 & age < 18
(18 missing values generated)
```

```
. label variable kid "householders have a kid at home"
```

```
.
```

```

. by fam_id: egen s_kid = sum(kid)
. label variable s_kid "the total number of children householders have at home"
.
. list fam_id pernum relate age kid s_kid , sepby(fam_id) nol

```

	fam_id	pernum	relate	age	kid	s_kid
1.	18	1	101	41	.	1
2.	18	2	201	43	.	1
3.	18	3	301	13	1	1
4.	18	4	301	22	.	1
5.	8212	1	101	44	.	1
6.	8212	2	201	50	.	1
7.	8212	3	301	13	1	1
8.	8212	4	301	18	.	1
9.	8212	5	301	19	.	1
10.	8212	6	301	22	.	1
11.	8212	7	301	23	.	1
12.	8212	8	501	59	.	1
13.	8212	9	701	30	.	1
14.	8212	10	701	43	.	1
15.	8212	11	1001	21	.	1
16.	8212	12	1001	30	.	1
17.	8212	13	1001	43	.	1
18.	8212	14	1001	1	.	1
19.	8212	15	1001	8	.	1
20.	8212	16	1001	12	.	1

```

.
. *****
. * Remove unnecessary information from the data file
. *****
. by fam_id: replace s_kid =. if relate ~=101
(18 real changes made, 18 to missing)

```

```

. list fam_id pernum relate age kid s_kid , sepby(fam_id) nol

```

	fam_id	pernum	relate	age	kid	s_kid
1.	18	1	101	41	.	1
2.	18	2	201	43	.	.
3.	18	3	301	13	1	.
4.	18	4	301	22	.	.
5.	8212	1	101	44	.	1
6.	8212	2	201	50	.	.
7.	8212	3	301	13	1	.
8.	8212	4	301	18	.	.
9.	8212	5	301	19	.	.
10.	8212	6	301	22	.	.
11.	8212	7	301	23	.	.
12.	8212	8	501	59	.	.
13.	8212	9	701	30	.	.
14.	8212	10	701	43	.	.
15.	8212	11	1001	21	.	.
16.	8212	12	1001	30	.	.
17.	8212	13	1001	43	.	.
18.	8212	14	1001	1	.	.
19.	8212	15	1001	8	.	.
20.	8212	16	1001	12	.	.

```

. *****
. * What is the gender of the spouse for the householders
. *****
.
. by fam_id: gen    s_sex_temp= sex    if relate ==201
(18 missing values generated)

. label variable s_sex_temp "sex of the spouse, temporary variable"

.
. by fam_id: egen s_sex = max(s_sex_temp)

. label variable s_sex "sex of the spouse"

.
. list fam_id pernum relate sex s_sex_temp s_sex , sepby(fam_id) nol

```

	fam_id	pernum	relate	sex	s_sex_~p	s_sex
1.	18	1	101	2	.	1
2.	18	2	201	1	1	1
3.	18	3	301	1	.	1
4.	18	4	301	2	.	1
5.	8212	1	101	1	.	2
6.	8212	2	201	2	2	2
7.	8212	3	301	1	.	2
8.	8212	4	301	1	.	2
9.	8212	5	301	2	.	2
10.	8212	6	301	2	.	2
11.	8212	7	301	1	.	2
12.	8212	8	501	2	.	2
13.	8212	9	701	2	.	2
14.	8212	10	701	1	.	2
15.	8212	11	1001	2	.	2
16.	8212	12	1001	1	.	2
17.	8212	13	1001	2	.	2
18.	8212	14	1001	1	.	2
19.	8212	15	1001	1	.	2
20.	8212	16	1001	2	.	2

```

. *****
. * Remove unnecessary information from the data file
. *****
. by fam_id: replace s_sex =. if relate ~=101
(18 real changes made, 18 to missing)

.
. list fam_id pernum relate sex s_sex_temp s_sex , sepby(fam_id) nol

```

	fam_id	pernum	relate	sex	s_sex_~p	s_sex
1.	18	1	101	2	.	1
2.	18	2	201	1	1	.
3.	18	3	301	1	.	.
4.	18	4	301	2	.	.
5.	8212	1	101	1	.	2
6.	8212	2	201	2	2	.
7.	8212	3	301	1	.	.
8.	8212	4	301	1	.	.
9.	8212	5	301	2	.	.
10.	8212	6	301	2	.	.
11.	8212	7	301	1	.	.
12.	8212	8	501	2	.	.
13.	8212	9	701	2	.	.

14.		8212	10	701	1	.	.	
15.		8212	11	1001	2	.	.	
16.		8212	12	1001	1	.	.	
17.		8212	13	1001	2	.	.	
18.		8212	14	1001	1	.	.	
19.		8212	15	1001	1	.	.	
20.		8212	16	1001	2	.	.	
+-----+								

.

.

. log close

  name: <unnamed>

  log: F:\workshop\long format\family\_relation\_05\_21\_18.log

  log type: text

  closed on: 21 May 2018, 12:12:36

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