

```
*-----  
Exercise to demonstrate how to MERGE datasets  
-----;  
*based on SAS (V. 8.02) system help examples;  
*phbrito 2003;
```

```
/*MERGE
```

Merging combines rows from two SAS tables into a single row in a new SAS table. The new table contains all columns from the original tables unless you specify otherwise.

When you MERGE two SAS tables, the SAS system combines the first row in both tables into the first row of the new table, the second row in both tables into the second row of the new table, and so on. In this type of MERGE, called a one-to-one MERGE, the number of the rows in the new table is equal to the number of rows in the largest of the two tables merged.*/

```
options linesize=72      /* ideal page width*/  
        pagesize=66       /* ideal page length*/  
        nocenter          /*left alignment*/  
        missing='.';      /* missing data*/
```

```
/* Input data files */
```

```
data File1;  
input ID $1-2 name $4-7 Age 9-10;  
cards;  
34 JACK 28  
16 TOM 45  
58 GAIL 26  
60 PAUL 52
```

```
;
```

```
run;
```

```
data File2;  
input ID $1-2 Phone $4-7 Room $9-11;  
cards;  
16 1289 103  
58 1321 211  
34 3456 180
```

```
;
```

```
run;
```

```
/* Sort both data files by the linking variable */
```

```
proc sort data=File1;
```

```
by ID;
```

```
run;
```

```
proc sort data=File2;
```

```
by ID;
```

```
run;
```

```
/* Print data files */
```

```
proc print data=File1;
```

```
title 'data file 1';
```

```
run;
```

```
proc print data=File2;
```

```
title 'data file 2';
```

```
run;
```

```
/* Merge both data files by the linking variable */
```

```
Data All;
```

```
Merge File1 File2;
```

```
by ID;
```

```
run;
```

```
proc print data=All;
```

```
title 'Merged data';
```

```
run;
```

OUTPUT

data file 1

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| Obs | ID | name | Age |
|-----|----|------|-----|
| 1 | 16 | TOM | 45 |
| 2 | 34 | JACK | 28 |
| 3 | 58 | GAIL | 26 |
| 4 | 60 | PAUL | 52 |

data file 2

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| Obs | ID | Phone | Room |
|-----|----|-------|------|
| 1 | 16 | 1289 | 103 |
| 2 | 34 | 3456 | 180 |
| 3 | 58 | 1321 | 211 |

Merged data

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| Obs | ID | name | Age | Phone | Room |
|-----|----|------|-----|-------|------|
| 1 | 16 | TOM | 45 | 1289 | 103 |
| 2 | 34 | JACK | 28 | 3456 | 180 |
| 3 | 58 | GAIL | 26 | 1321 | 211 |
| 4 | 60 | PAUL | 52 | | |