

```
*SAS MERGE DATASETS;
/*
```

Multiple SAS data sets can be merged based on a specific common variable to give a single data set. This is done using the MERGE statement and BY statement.

There are two Prerequisites for merging data sets given below -

- input data sets must have at least one common variable to merge on.
- input data sets must be sorted by the common variable(s) that will be used to merge on.

```
Syntax:
MERGE Data-Set 1 Data-Set 2
BY Common Variable
*/
```

```
*Data Merging;
DATA SALARY;
    INPUT empid name $ salary  ;
DATALINES;
1 Rick  623.3
2 Dan  515.2
3 Mike  611.5
4 Ryan  729.1
5 Gary  843.25
6 Tusar  578.6
7 Pranab  632.8
8 Rasmi  722.5
;
RUN;

DATA DEPT;
    INPUT empid dEPT $ ;
DATALINES;
1 IT
2 OPS
3 IT
4 HR
5 FIN
6 IT
9 OPS
8 FIN
;
RUN;

DATA All_details;
MERGE SALARY DEPT;
BY empid;
RUN;

PROC PRINT DATA = All_details;
RUN;
```

```
*Merging only the Matches;
/*
To avoid the missing values in the result we can consider keeping only the
observations with matched values for the common variable.
That is achieved by using the IN statement.
*/
```

```
DATA All_details;
MERGE SALARY(IN = a) DEPT(IN = b);
BY empid;
IF a = 1 and b = 1;
RUN;

PROC PRINT DATA = All_details;
RUN;
```