

# 1. Tables

## Tables in SAS

*Example SAS syntax to create a table*

```
data weight_club;  
input IdNumber 1-4 Name $ 6-24 Team $ StartWeight EndWeight;  
Loss=StartWeight-EndWeight;  
datalines;  
1023 David Shaw      red 189 165  
1049 Amelia Serrano  yellow 145 124  
1219 Alan Nance      red 210 192  
1246 Ravi Sinha      yellow 194 177  
1078 Ashley McKnight red 127 118  
;  
run;
```

`data` keyword is used to define the table name (table names must not contain spaces)

`input` keyword is used to define the column names.

`Loss=StartWeight-EndWeight` is used to define a new column named `Loss` derived from `StartWeight` and `EndWeight`.

`dataline` or `cards` is used to indicate the beginning of the table.

`IdNumber 1-4` is used to state that the characters in position 1-4 of each row would fall under the column `IdNumber` and similarly for `Name $ 6-24`. This eliminates the need of delimiters.

The `$` after `Name` and `Team` indicates that values of the `Name` and `Team` columns are strings.

All command lines end with semicolons `;`.

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*Example of SAS syntax to create a table with missing values*

```
data weight_club;  
input IdNumber 1-4 Name $ 6-24 Team $ StartWeight EndWeight;
```

```

Loss=StartWeight-EndWeight;
cards;
    David Shaw          red 189 165
1049 Amelia Serrano    . 145 124
1219 Alan Nance        red . 192
1246 Ravi Sinha        yellow 194 .
1078 Ashley McKnight   red 127 118
;
run;

```

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*Classwork 1*

```

data company_data;
input Sr_No 1-2 Company $ 4-17 NCI_2021 NCI_2020 NCI_2019 NCI_2018 NCI_2017;
NCI_Avg=(NCI_2021+NCI_2020+NCI_2019+NCI_2018+NCI_2017)/5;
cards;
1  RIL          74257 -143583 -53949 -59109 -54949
2  ICICI Bank   -54185.5 -36945.4 -24040.8 -38965.6 7000.3
3  Axis Bank    -54179.7 -9667.6 -18748.5 -10252.7 -12632.7
4  IOCL         -22154 -26882.4 -20771.5 -15778.7 -14733.9
5  Tata Steel   -13008.5 -17634.7 -16350 -12273.4 -3956.4
6  JSW Steel     -2609 -19092 -11432 -6134 -6284
7  HDFC Life     -8995.29 -7782.02 -10185.6 -4422.69 -5106.26
8  ICICI Pru     -5089.82 -10802.2 -7562.81 -5391.74 -699.01
9  HDFC          -8499.78 -5854.23 -9951.8 -3586.61 -1397.83
10 Maruti Suzuki -7283.9 -463.9 -3538.3 -8282.1 -1397.83
11 M&M          -14563.9 -2576.44 -2549.02 -5109.71 -2856.93
12 Bajaj Finance 424.26 -9632.54 -6637.58 504.94 -3048.24
13 UltraTech     -8986.53 -3950.86 -3987.95 1896.74 -2365.12
14 Federal Bank  -3900.27 -4664.81 -3371.98 -1576.45 -2383.34
15 Adani Ports   -7966.6 -31.35 -2403.12 -550.04 -4181.08
;
run;

```