DATA CONTROL VECTOR

STEPS

1) Establish the Data Control Vector (DCV).

2) Set all positions to missing values (.).

3) Move observation pointer to correct (next) line in data.

4) Fill the DCV with data following the Input statement.

5) Do any calculations in the data step.

6) Output the DCV to the dataset.

7) Repeat steps 2-6 until all data is used.

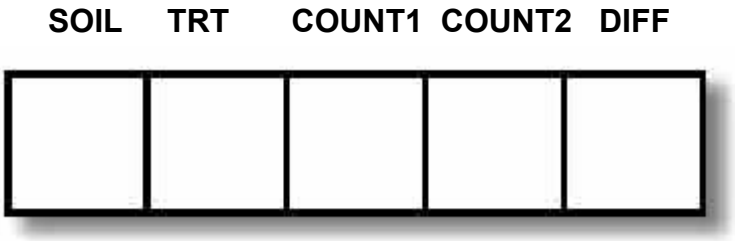
Example

SAS Code:

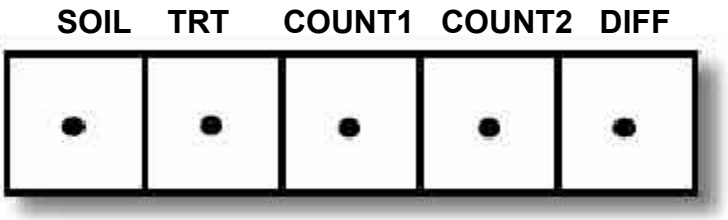
```
DATA EXP1;
        INPUT SOIL $ TRT COUNT1 COUNT2;
        DIFF = COUNT2 - COUNT1;

        CARDS;
        A       1       10      15
        A       2       9       .
        B       3       11      16
        B       4       10      11
        ;
RUN;
```

DATA CONTROL VECTOR (cont.)

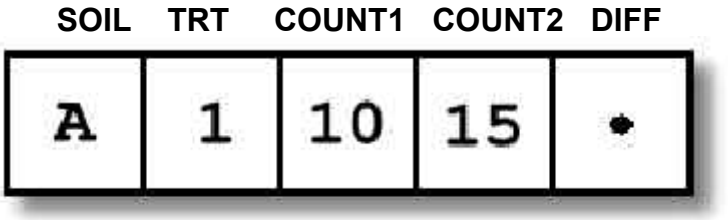
STEP 1



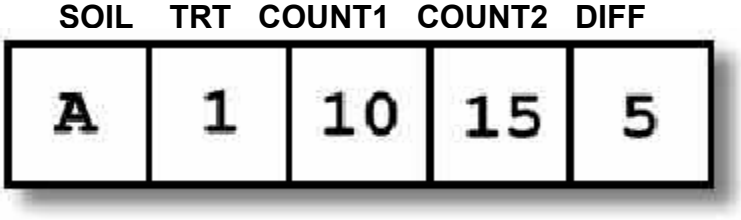
STEP 2



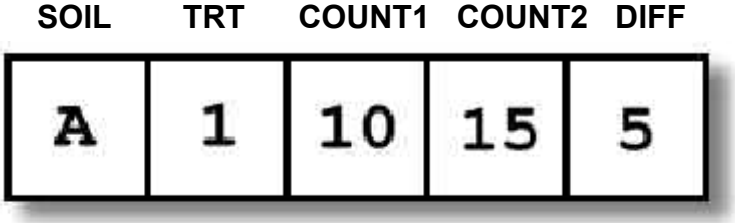
STEP 3-4



STEP 5



STEP 6



DATASET EXP1

A 1 10 15 5

DATA CONTROL VECTOR (cont.)

Repeat steps 2-6

	SOIL	TRT	COUNT1	COUNT2	DIFF
(2)	•	•	•	•	•
(3-4)	A	2	9	•	•
(5)	A	2	9	•	•

NOTE: DIFF is still missing. Step 5 implies that DIFF = COUNT2 - COUNT1, but COUNT2 is missing. Since the operation is undefined SAS sets DIFF to missing also. Rectangular structure is maintained!

(6)	A	2	9	•	•

DATASET EXP1

```
A    1  10  15    5
A    2   9   .    .
```

This will continue until the last line of data has been read and processed.