

SAS Group by & Retain

```
data t;
  input a MMDDYY8. b ;
cards;
01/11/99 1
03/12/98 0
04/12/98 1
11/12/97 1
02/23/96 0
03/12/78 0
;
PROC SORT DATA=T;
BY B A;
data T1;
  SET T;
BY B;
A1=LAG(A);
IF FIRST.B THEN A1=.;
DATE=A+1;
proc print data=t1;

format a DATE A1 yymmdd8.;
run;

PROC SORT DATA=T;
BY B A;
data T1;
  SET T;
BY B;
retain s;
if first.b then s=a;

proc print data=t1;
format a s yymmdd8.;
run;
```

Results

Obs	a	b	A1	DATE
1	78-03-12	0	.	78-03-13
2	96-02-23	0	78-03-12	96-02-24
3	98-03-12	0	96-02-23	98-03-13
4	97-11-12	1	.	97-11-13
5	98-04-12	1	97-11-12	98-04-13
6	99-01-11	1	98-04-12	99-01-12

Obs	a	b	s
1	78-03-12	0	78-03-12
2	96-02-23	0	78-03-12
3	98-03-12	0	78-03-12
4	97-11-12	1	97-11-12
5	98-04-12	1	97-11-12
6	99-01-11	1	97-11-12

SAS Group by

```
data t2;
  input a C D;
cards;
1 1 1
2 1 1
3 1 1
4 1 1
5 1 1
1 2 2
2 2 2
3 2 2
4 2 2
5 2 2
1 3 3
2 3 3
3 3 3
4 3 3
5 3 3
;
PROC SORT DATA=T2;
BY A C D;

DATA T;
  SET T2;
BY A C;
IF FIRST.A AND FIRST.C ;

PROC PRINT DATA=T;
RUN;
```

Results

Obs	a	C	D
1	1	1	1
2	2	1	1
3	3	1	1
4	4	1	1
5	5	1	1