3. Keep, Drop, Rename and Sort

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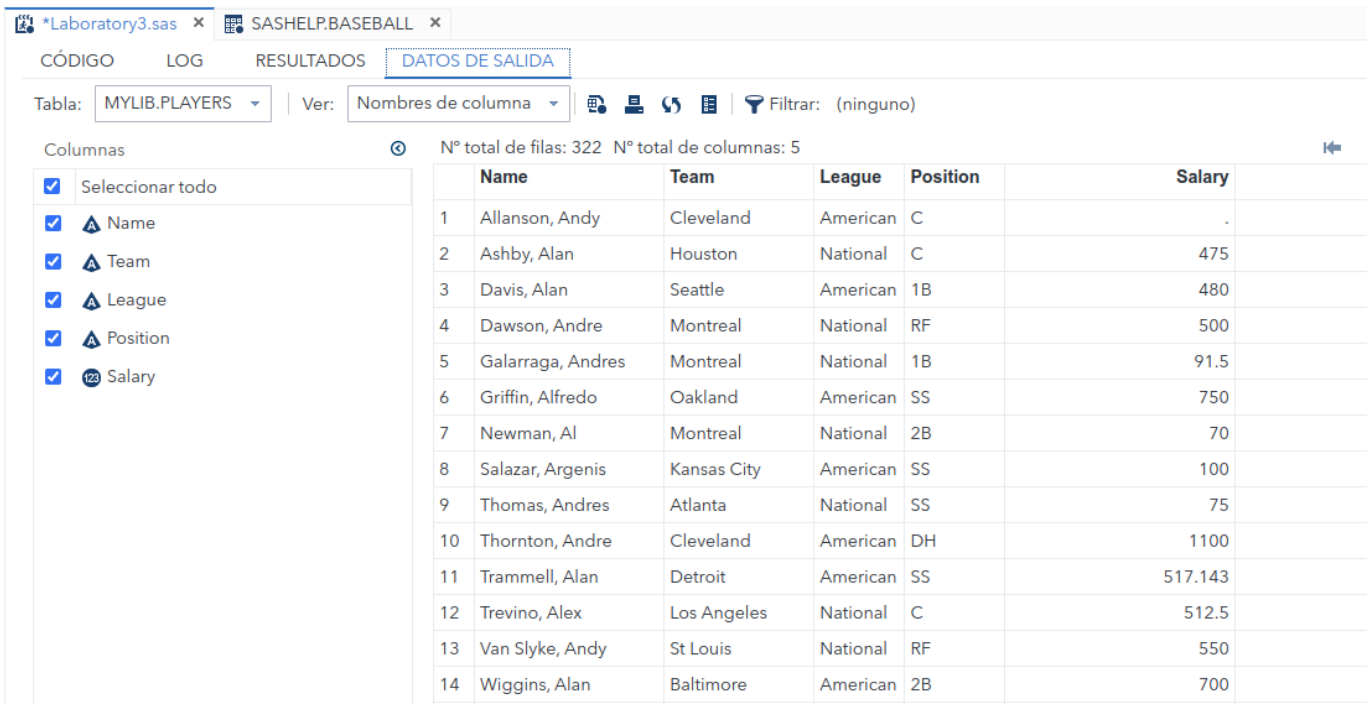
Exercise 1. Using data set sashelp.baseball create data set *mylib.players*, which contains name, team, league, position and salary. Then using *mylib.players* create table *mylib.national* players containing observations about players from national league. drop colum *league*.

For the first part we are going to use the clausule **keep** that specifies the names of the variables to the output data set. Then, we have:

```
LIBNAME mylib "/home/u63324691/soulutions";

data mylib.players;
    set sashelp.baseball;
    keep name team league position salary;
run;
```



	Name	Team	League	Position	Salary
1	Allanson, Andy	Cleveland	American	C	.
2	Ashby, Alan	Houston	National	C	475
3	Davis, Alan	Seattle	American	1B	480
4	Dawson, Andre	Montreal	National	RF	500
5	Galarraga, Andres	Montreal	National	1B	91.5
6	Griffin, Alfredo	Oakland	American	SS	750
7	Newman, Al	Montreal	National	2B	70
8	Salazar, Argenis	Kansas City	American	SS	100
9	Thomas, Andres	Atlanta	National	SS	75
10	Thornton, Andre	Cleveland	American	DH	1100
11	Trammell, Alan	Detroit	American	SS	517.143
12	Trevino, Alex	Los Angeles	National	C	512.5
13	Van Slyke, Andy	St Louis	National	RF	550
14	Wiggins, Alan	Baltimore	American	2B	700

Now, for the second part we are going to search players from the national league and then drop this value using the clausule **drop**. Then:

```
data mylib.national_players;
    set mylib.players;
    where league like "National";
    drop league;
run;
```

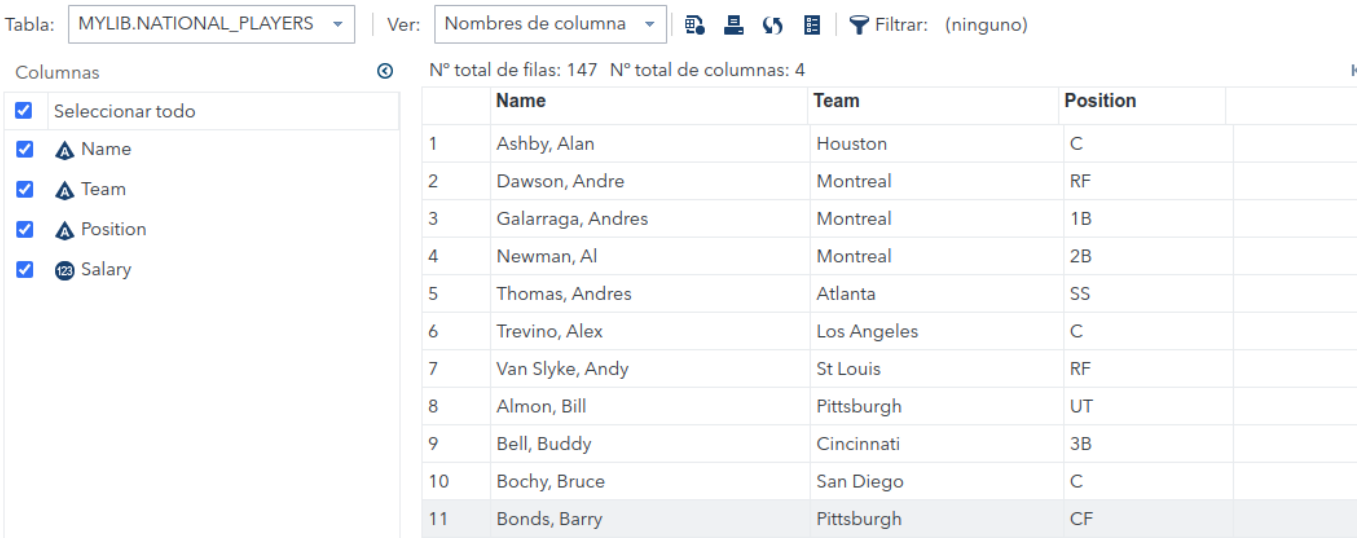


Tabla: MYLIB.NATIONAL_PLAYERS | Ver: Nombres de columna | Filtrar: (ninguno)

Columnas

- Seleccionar todo
- Name
- Team
- Position
- Salary

N° total de filas: 147 N° total de columnas: 4

	Name	Team	Position
1	Ashby, Alan	Houston	C
2	Dawson, Andre	Montreal	RF
3	Galarraga, Andres	Montreal	1B
4	Newman, Al	Montreal	2B
5	Thomas, Andres	Atlanta	SS
6	Trevino, Alex	Los Angeles	C
7	Van Slyke, Andy	St Louis	RF
8	Almon, Bill	Pittsburgh	UT
9	Bell, Buddy	Cincinnati	3B
10	Bochy, Bruce	San Diego	C
11	Bonds, Barry	Pittsburgh	CF

Exercise 2. In one data step create two data sets:

- *mylib.players_salaries* containing names and salaries of baseball players from th table *sashelp.baseball*.
- *mylib.players_teams* containing names and teams of baseball players from the table *sashelp.baseball*

```
data mylib.players_salaries(keep=name salary) mylib.players_teams(keep=name
team);
    set sashelp.baseball;
run;
```

Tabla: MYLIB.PLAYERS_SALARIES | Ver: Nombres de columna | Filtrar: (ninguno)

Columnas

- Seleccionar todo
- Name
- Salary

N° total de filas: 322 N° total de columnas: 2

	Name	Salary
1	Allanson, Andy	.
2	Ashby, Alan	475
3	Davis, Alan	480
4	Dawson, Andre	500
5	Galarraga, Andres	91.5
6	Griffin, Alfredo	750
7	Newman, Al	70

Tabla: MYLIB.PLAYERS_TEAMS | Ver: Nombres de columna | Filtrar: (ningun

Columnas

- Seleccionar todo
- Name
- Team

N° total de filas: 322 N° total de columnas: 2

	Name	Team
1	Allanson, Andy	Cleveland
2	Ashby, Alan	Houston
3	Davis, Alan	Seattle
4	Dawson, Andre	Montreal

Exercise 3. Change names of variables in data set *mylib.players* to spanish.

```
data mylib.jugadores;
    set mylib.players;
    rename name=nombre team=equipo league=liga position=posicion
salary=salario;
run;
```

Tabla: MYLIB.JUGADORES | Ver: Nombres de columna | Filtrar: (ninguno)

Columnas

- Seleccionar todo
- nombre
- equipo
- liga
- posicion
- salario

N° total de filas: 322 N° total de columnas: 5

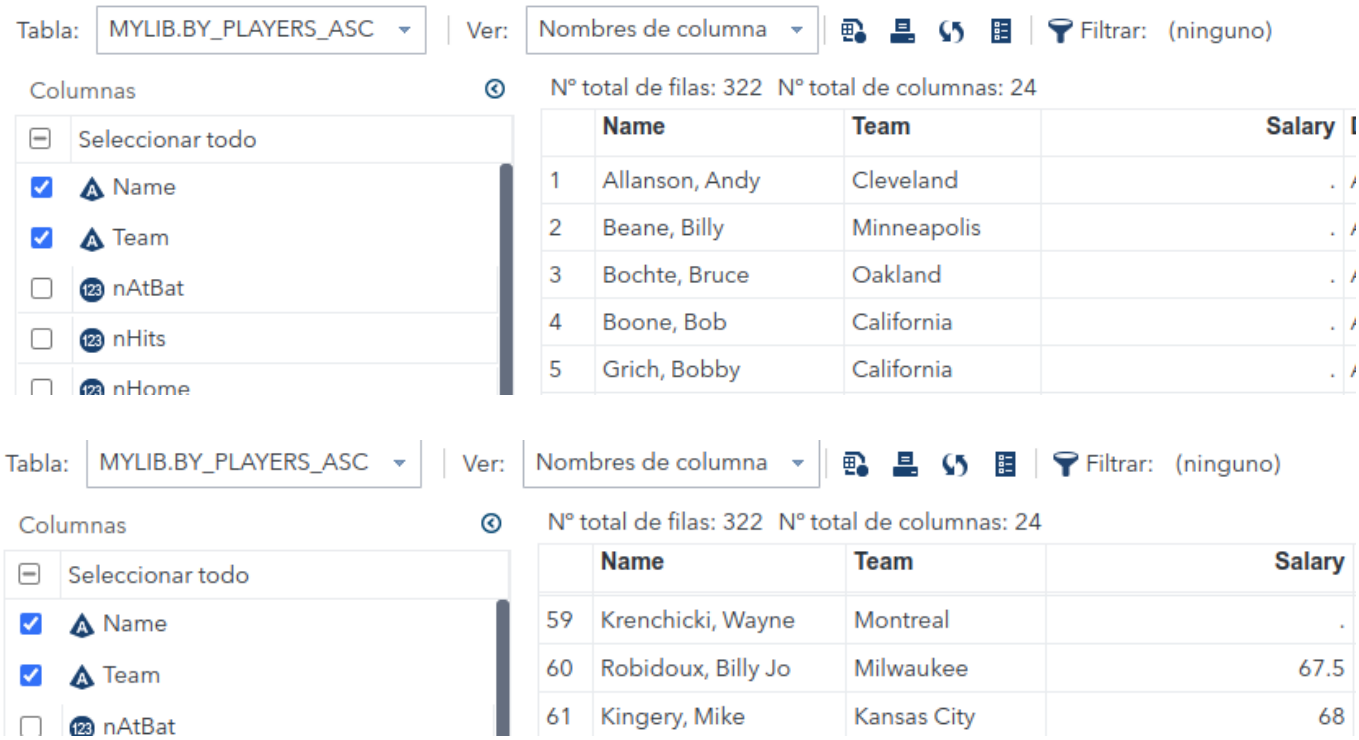
	nombre	equipo	liga	posicion	salario
1	Allanson, Andy	Cleveland	American	C	.
2	Ashby, Alan	Houston	National	C	475
3	Davis, Alan	Seattle	American	1B	480
4	Dawson, Andre	Montreal	National	RF	500
5	Galarraga, Andres	Montreal	National	1B	91.5
6	Griffin, Alfredo	Oakland	American	SS	750
7	Newman, Al	Montreal	National	2B	70

Exercise 4.

1. Sort data set *sashelp.baseball* by Salary in ascending (default) order. Store the results in new data set *by_players_asc*. Who has the lowest salary?

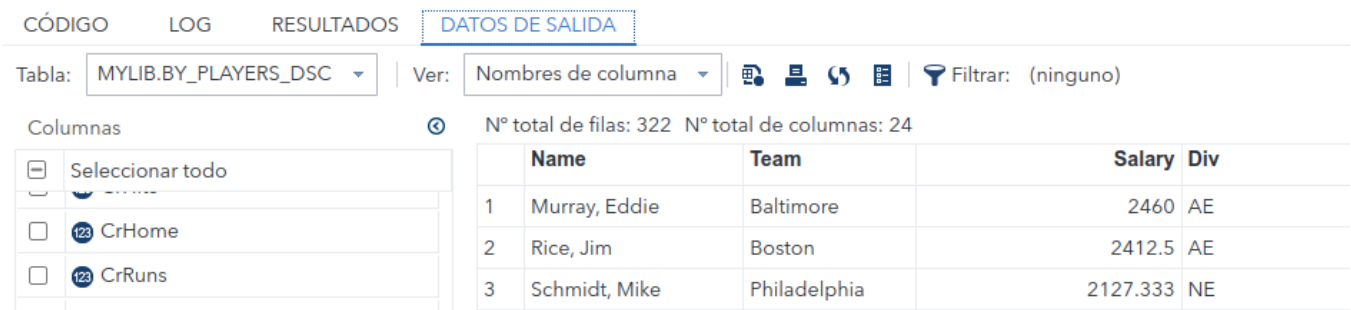
```
proc sort data=sashelp.baseball out=mylib.by_players_asc;
    by salary;
run;
```

There are many players without salary. The first ont to have it is Robidoux, Billy Jo:



2. Sort data set *sashelp.baseball* by Salary in descending order. Store the results in new data set by_players_dsc. Who has the highest salary?

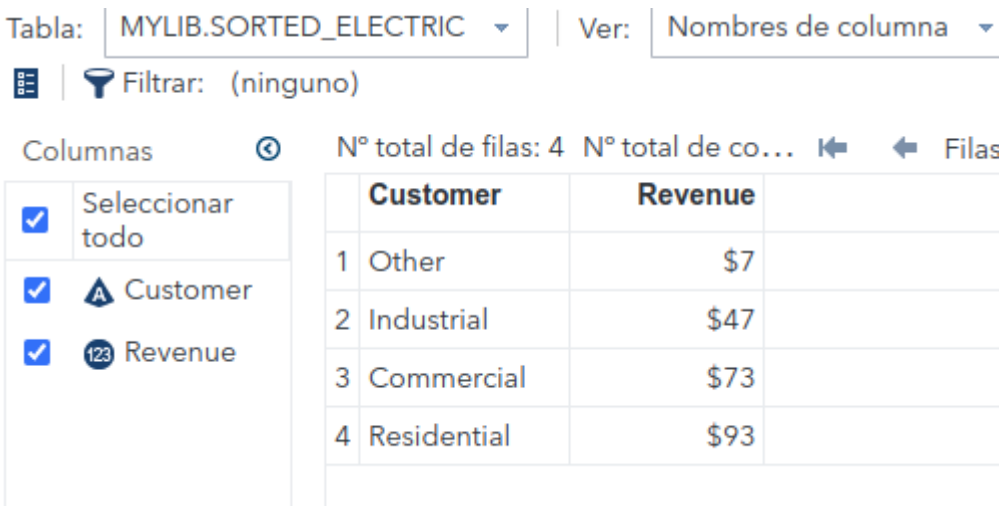
```
proc sort data=sashelp.baseball out=mylib.by_players_dsc;
    by descending salary;
run;
```



Murray has the highest salary.

Exercise 5. See how to use PROC SORT with keep and WHERE (as statement and as option). Using *sashelp.electric* create new data set *sorted_electric*, which will be sorted ascending by variable *revenue* and descending by variable *customer*. The result should contain only variables *customer* and *revenue* and observations from the year 1999.

```
proc sort data=sashelp.electric(where=(year=1999))
out=mylib.sorted_electric(keep= revenue customer);
    by revenue descending customer;
run;
```

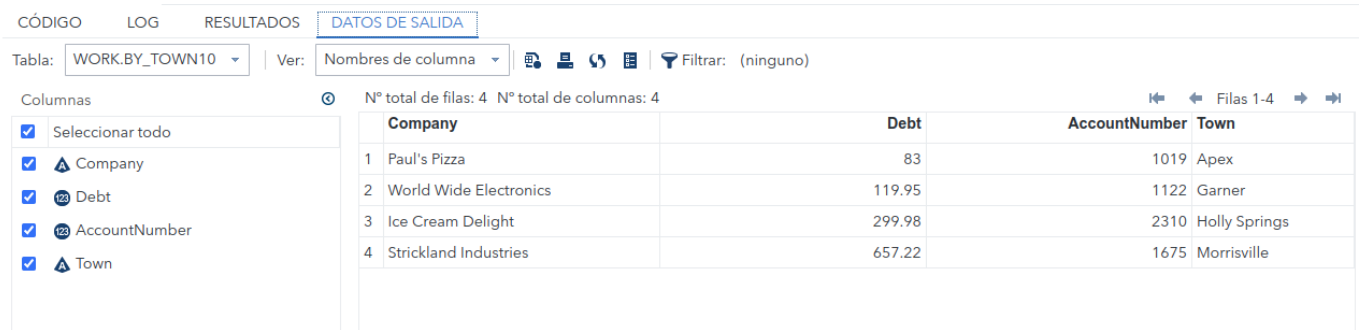


	Customer	Revenue
1	Other	$7
2	Industrial	$47
3	Commercial	$73
4	Residential	$93

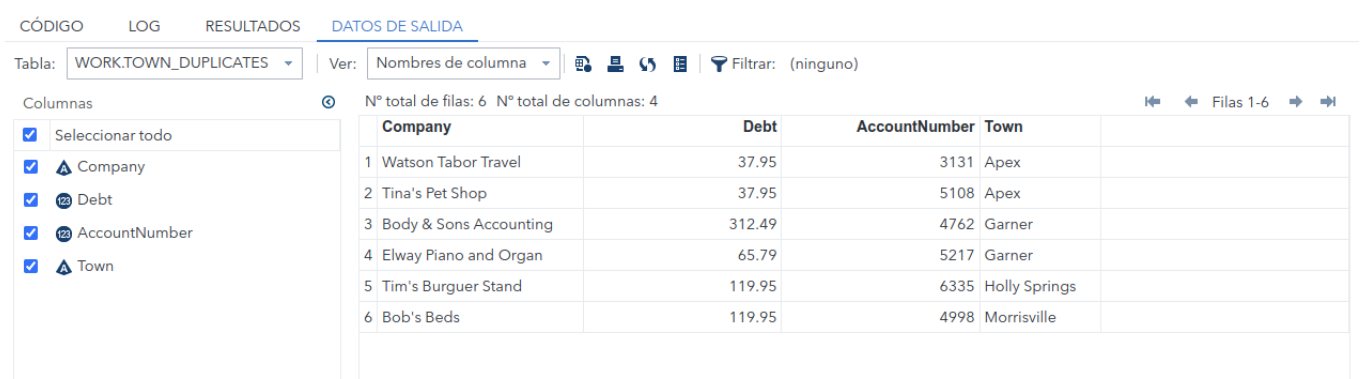
Exercise 6. Sort first 10 observations from data set *account* by variable *Town* without reapeating values of variable *Town*. Save results to the set *by_town10*. Save duplicates to the set *town_duplicates*.

```
data account;
INPUT Company $ 1-23 Debt 25-30 AccountNumber 33-36 Town $ 39-51;
/*1-22,25-30 etc - columns*/
    dataLINES;
    Paul's Pizza             83.00  1019  Apex
    World Wide Electronics 119.95  1122  Garner
    Strickland Industries  657.22  1675  Morrisville
    Ice Cream Delight      299.98  2310  Holly Springs
    Watson Tabor Travel     37.95  3131  Apex
    Body & Sons Accounting 312.49  4762  Garner
    Bob's Beds             119.95  4998  Morrisville
    Tina's Pet Shop         37.95  5108  Apex
    Elway Piano and Organ   65.79  5217  Garner
    Tim's Burguer Stand    119.95  6335  Holly Springs
    Peter's Auto Parts      65.79  7288  Apex
    Deluxe Hardware        467.12  8941  Garner
    Pauline's Antiques     302.05  9112  Morrisville
    Apex Catering           37.95  9923  Apex
run;
```

```
proc sort data=account(FIRSTOBS=1 OBS=10) out=by_town10 dupout=town_duplicates
NODUPKEY;
    by town;
run;
```



	Company	Debt	AccountNumber	Town
1	Paul's Pizza	83	1019	Apex
2	World Wide Electronics	119.95	1122	Garner
3	Ice Cream Delight	299.98	2310	Holly Springs
4	Strickland Industries	657.22	1675	Morrisville



	Company	Debt	AccountNumber	Town
1	Watson Tabor Travel	37.95	3131	Apex
2	Tina's Pet Shop	37.95	5108	Apex
3	Body & Sons Accounting	312.49	4762	Garner
4	Elway Piano and Organ	65.79	5217	Garner
5	Tim's Burguer Stand	119.95	6335	Holly Springs
6	Bob's Beds	119.95	4998	Morrisville