6. Reports

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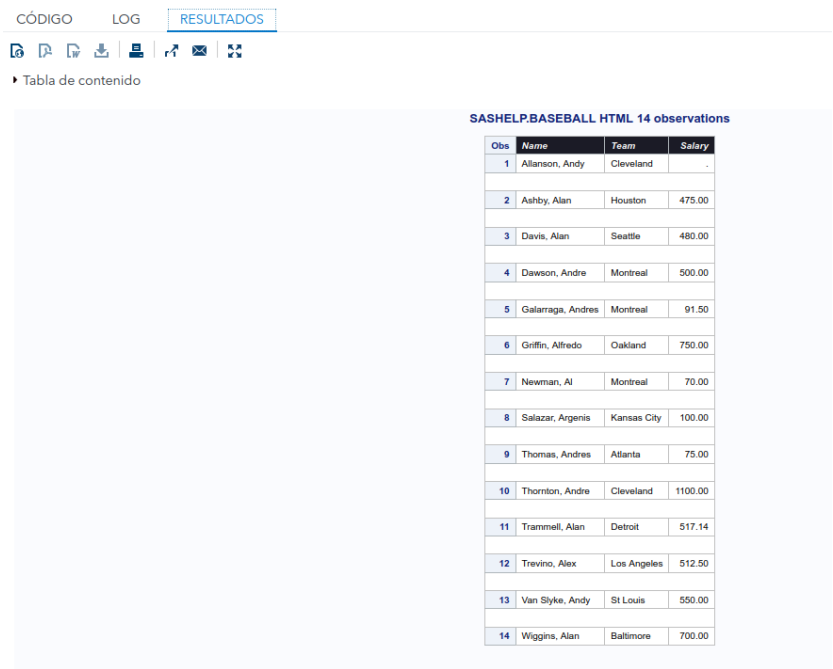
Exercise 1. Create html, pdf and listing reports abouts teams and salaries for first 14 players from the table *sashelp.baseball*. Use variable labels as column headings. In your html report:

- set style of column headings: italic font size, white color of font and nice color of background.
- let blank line between observations.

```
option obs=14;
ods html file='/home/u63324691/soulutions/ex1.html';
proc print data=sashelp.baseball
    style(header)={fontstyle=italic color=white backgroundcolor=dab}
    blankline=(count= 1);
    var name team salary;
    title 'SASHELP.BASEBALL HTML 14 observations';
run;
```

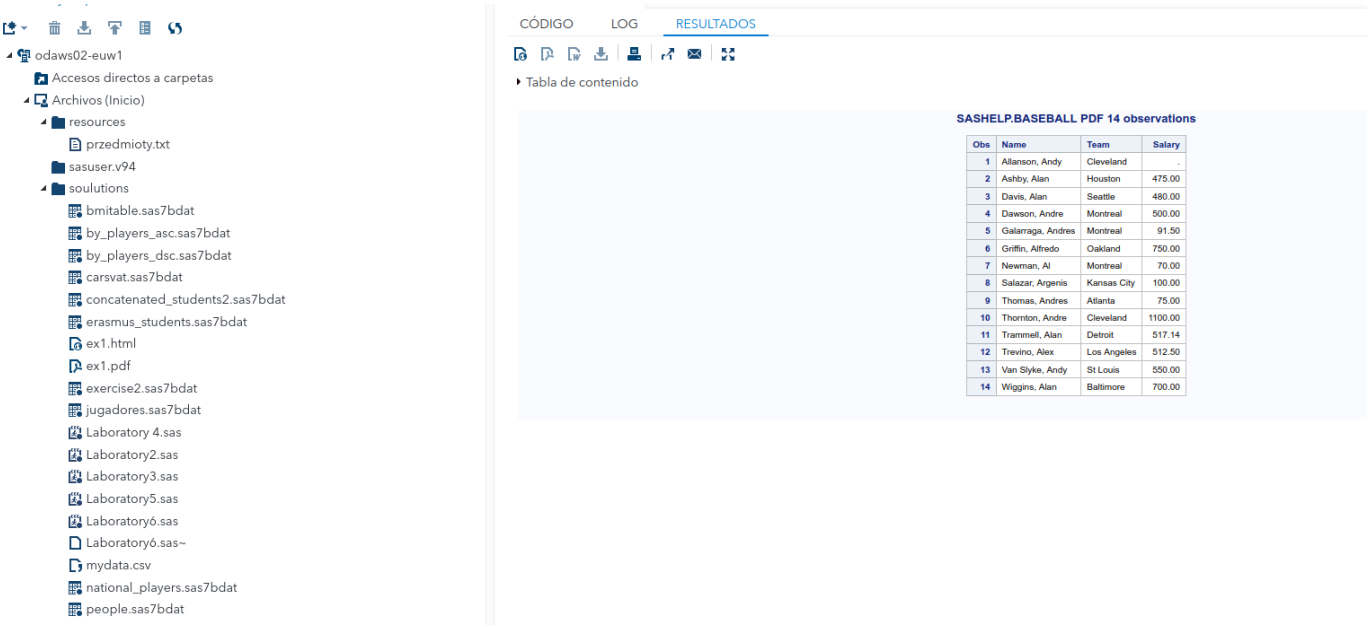


```
options obs=14;
ods html close;
ods listing;
proc print data=sashelp.baseball double;
   var name team salary;
   title 'SASHELP.BASEBALL LISTING 14 observations';
run;
ods listing close;
```

SASHELP.BASEBALL LISTING 14 observations

Obs	Name	Team	Salary
1	Allanson, Andy	Cleveland	.
2	Ashby, Alan	Houston	475.00
3	Davis, Alan	Seattle	480.00
4	Dawson, Andre	Montreal	500.00
5	Galarraga, Andres	Montreal	91.50
6	Griffin, Alfredo	Oakland	750.00
7	Newman, Al	Montreal	70.00
8	Salazar, Argenis	Kansas City	100.00
9	Thomas, Andres	Atlanta	75.00
10	Thornton, Andre	Cleveland	1100.00
11	Trammell, Alan	Detroit	517.14
12	Trevino, Alex	Los Angeles	512.50
13	Van Slyke, Andy	St Louis	550.00
14	Wiggins, Alan	Baltimore	700.00

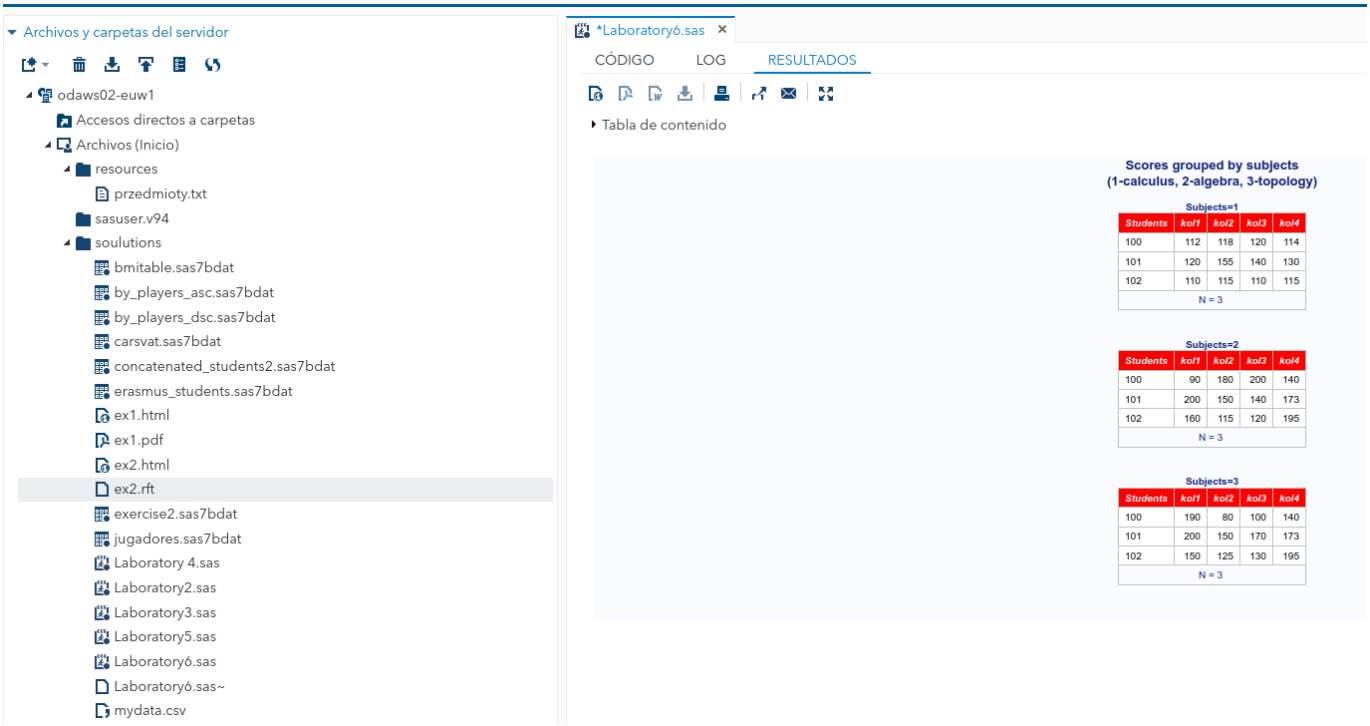
```
options obs=14;
ods html close;
ods pdf file='/home/u63324691/soulutions/ex1.pdf';
proc print data=sashelp.baseball;
   var name team salary;
   title 'SASHELP.BASEBALL PDF 14 observations';
run;
ods pdf close;
```



Exercise 2. Using the following table create html and rtf reports with scores for each subject. Suppress the printing of observation numbers at the beginning of the rows. Add title: 'Scores grouped by subjects' and second title: ’(1-calculus, 2-algebra, 3-topology)’. Associate labels ’Students’ and ’Subjects’ with variables students id and sub- jects id. Use labels as a column headings. Change style of headings kol1, kol2, kol3 and kol4 to have every bacground header in different colour. Print the number of observations in the last row of your report.

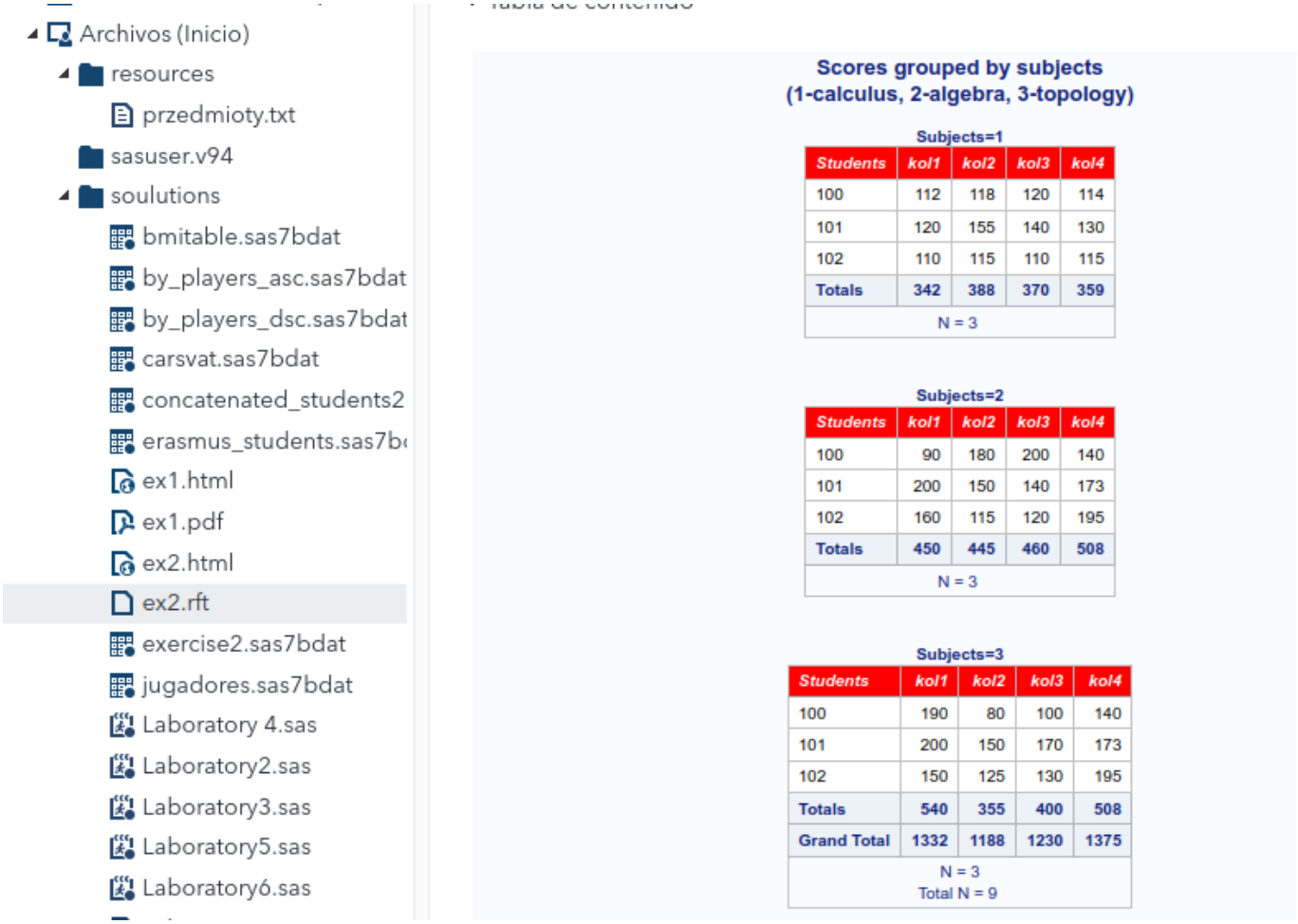
```
data scores;
input students_id $ subjects_id $ kol1 kol2 kol3 kol4;
datalines;
100 1 112 118 120 114
101 1 120 155 140 130
102 1 110 115 110 115
100 2 90 180 200 140
101 2 200 150 140 173
102 2 160 115 120 195
100 3 190 80 100 140
101 3 200 150 170 173
102 3 150 125 130 195
;
run;
```

```
proc sort data=scores;
by subjects_id;
run;
ods html file='/home/u63324691/soulutions/ex2.html';
proc print data=scores n noobs label
    style(header)={fontstyle=italic backgroundcolor=red color=white};
    by subjects_id;
    label     students_id='Students'
            subjects_id='Subjects';
    title 'Scores grouped by subjects';
    title2 '(1-calculus, 2-algebra, 3-topology)';
run;
ods html close;
ods html file='/home/u63324691/soulutions/ex2.rft';
proc print data=scores n noobs label
    style(header)={fontstyle=italic backgroundcolor=red color=white};
    by subjects_id;
    label     students_id='Students'
            subjects_id='Subjects';
    title 'Scores grouped by subjects';
    title2 '(1-calculus, 2-algebra, 3-topology)';
run;
```



Exercise3. Change report from exercise 2 adding totals for every test (kol1 kol2 kol3 kol4). Change sumlabel if needed.

```
proc sort data=scores;
by subjects_id;
run;
ods html file='/home/u63324691/soulutions/ex2.html';
proc print data=scores n noobs label
    sumlabel="Totals"
    grandtotal_label="Grand Total"
    style(header)={fontstyle=italic backgroundcolor=red color=white};
    by subjects_id;
    sum kol1 kol2 kol3 kol4;
    label     students_id='Students'
            subjects_id='Subjects';
    title 'Scores grouped by subjects';
    title2 '(1-calculus, 2-algebra, 3-topology)';
run;
```



Scores grouped by subjects
(1-calculus, 2-algebra, 3-topology)

Subjects=1

Students	kol1	kol2	kol3	kol4
100	112	118	120	114
101	120	155	140	130
102	110	115	110	115
Totals	**342**	**388**	**370**	**359**

N = 3

Subjects=2

Students	kol1	kol2	kol3	kol4
100	90	180	200	140
101	200	150	140	173
102	160	115	120	195
Totals	**450**	**445**	**460**	**508**

N = 3

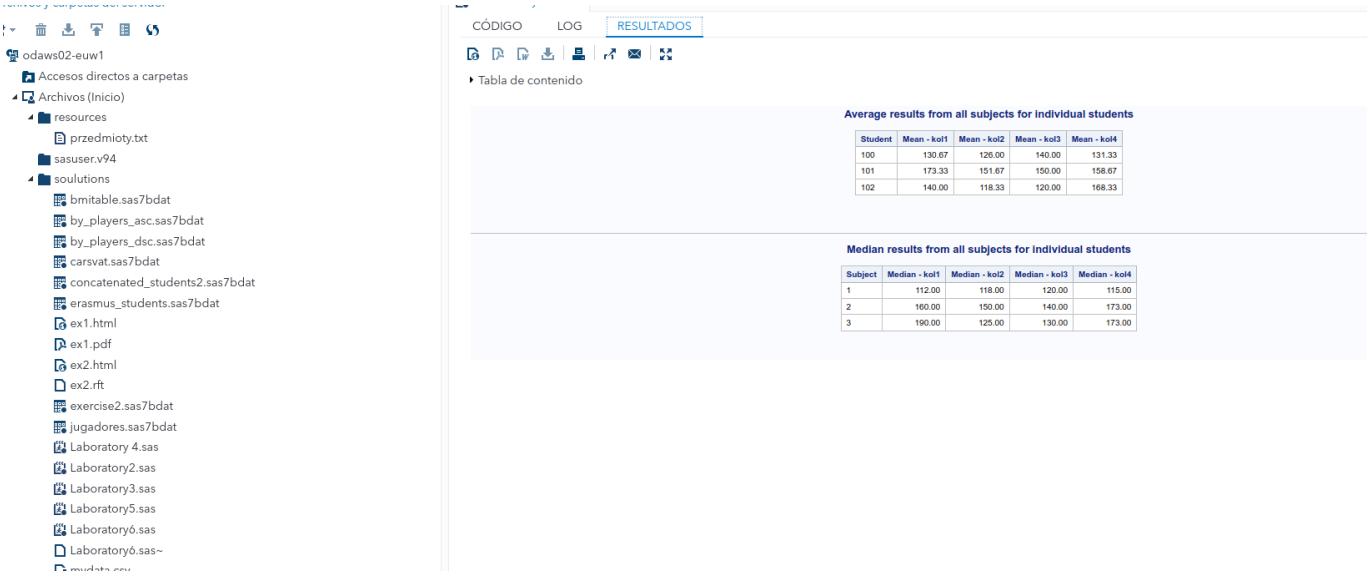
Subjects=3

Students	kol1	kol2	kol3	kol4
100	190	80	100	140
101	200	150	170	173
102	150	125	130	195
Totals	**540**	**355**	**400**	**508**
Grand Total	**1332**	**1188**	**1230**	**1375**

N = 3
Total N = 9

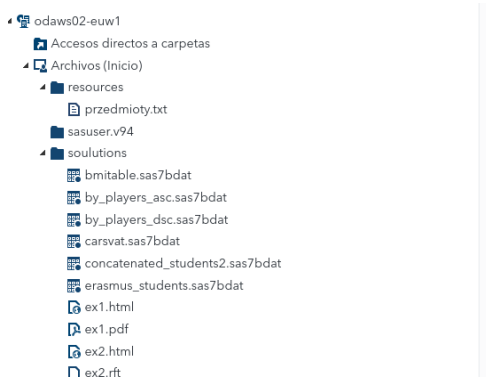
Exercise 4. Using table *scores* create the following reports.

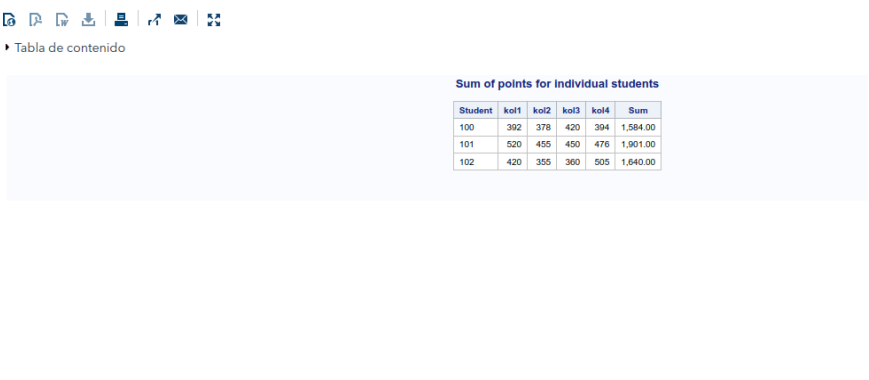
```
title 'Average results from all subjects for individual students';
proc report data=scores;
column students_id kol1 kol2 kol3 kol4;
define students_id / group "Student";
define kol1 / analysis mean format=6.2 "Mean - kol1";
define kol2 / analysis mean format=6.2 "Mean - kol2";
define kol3 / analysis mean format=6.2 "Mean - kol3";
define kol4 / analysis mean format=6.2 "Mean - kol4";
run;
title 'Median results from all subjects for individual students';
proc report data=scores;
column subjects_id kol1 kol2 kol3 kol4;
define subjects_id / group "Subject";
define kol1 / analysis median format=6.2 "Median - kol1";
define kol2 / analysis median format=6.2 "Median - kol2";
define kol3 / analysis median format=6.2 "Median - kol3";
define kol4 / analysis median format=6.2 "Median - kol4";
run;
```



Exercise 5. Using table *scores* create the following report.

```
title 'Sum of points for individual students';
proc report data=scores;
column students_id kol1 kol2 kol3 kol4 sum;
define students_id / group "Student";
define kol1 / analysis sum "kol1";
define kol2 / analysis sum "kol2";
define kol3 / analysis sum "kol3";
define kol4 / analysis sum "kol4";
define sum / computed format=COMMA15.2 "Sum";
compute sum;
sum = _c2_+_c3_+_c4_+_c5_;
endcomp;
run;
```





Exercise 6.

```
data allacty;
   input date : date7. event $ 9-36 who $ 37-48 long;
   datalines;
01APR23 Dist. Mtg.                  All          1
17APR23 Cumpleaños                    Dani         1
25APR23 VueltaPolonia                Dani         1
;
data cal;
   input date : date7. holiday $ 11-25 holilong @27;
   datalines;
06apr23   JuevesSanto     3
07apr23   ViernesSanto    1
;
run;
proc sort data=allacty;
   by date;
run;
options nodate pageno=1 linesize=132 pagesize=60;
proc calendar data=allacty holidata=cal;
    start date;
    dur long;
    holistart date;
    holivar holiday;
    holidur holilong;
    title1 'MyCalendar';
    title2 'Daniel';
run;
```