**IDS 462 STATISTICAL SOFTWARE FOR BUSINESS**

**HOMEWORK 4**

**TEAM MEMBERS**:

1. Harish Visweswaraiya
2. Balachandhar Chekka Narayanasame
3. Sriram Ravi
4. Vinodh Sankaran

**Problem 1**

1. DATA step toconcatenate **sales** and **non-sales**

**Code**

libname SAS\_HW4 '/folders/myfolders/SAS\_HW4';

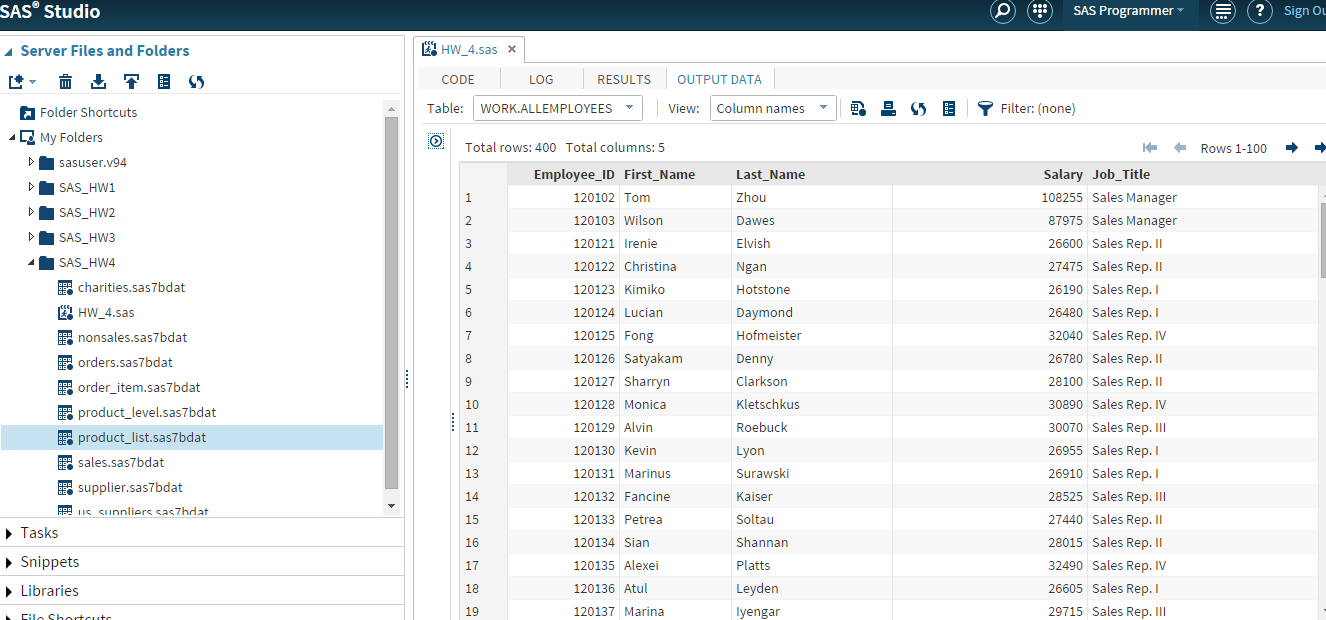
/\* Problem 1(a) \*/

data work.allemployees (keep=Employee\_ID First\_Name Last\_Name Job\_Title Salary);

set SAS\_HW4.sales SAS\_HW4.nonsales(rename=(first=first\_name last=last\_name));

run;

**Output Data**



1. Print report with 10 observations

**Code**

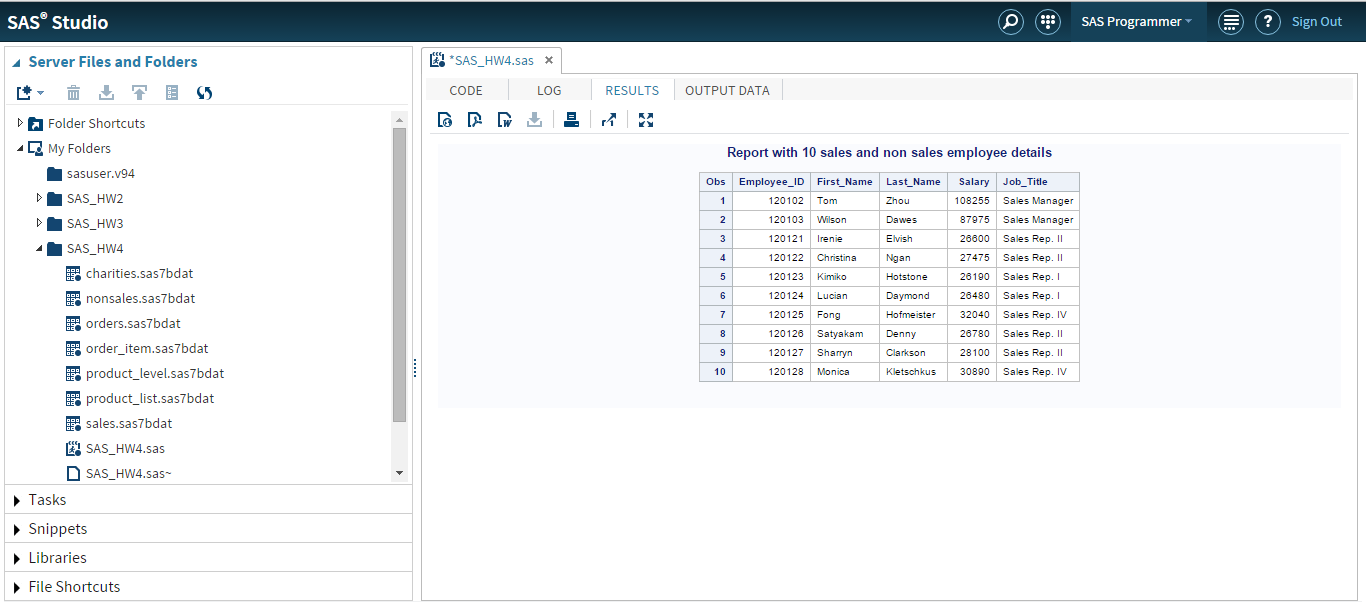
/\* Problem 1(b) \*/

proc print data=allemployees(obs=10);

title "Report with 10 sales and non sales employee details";

run;

**Output Data**



**Problem 2**

1. DATA step to concatenate **charities** and **us\_suppliers**

**Code**

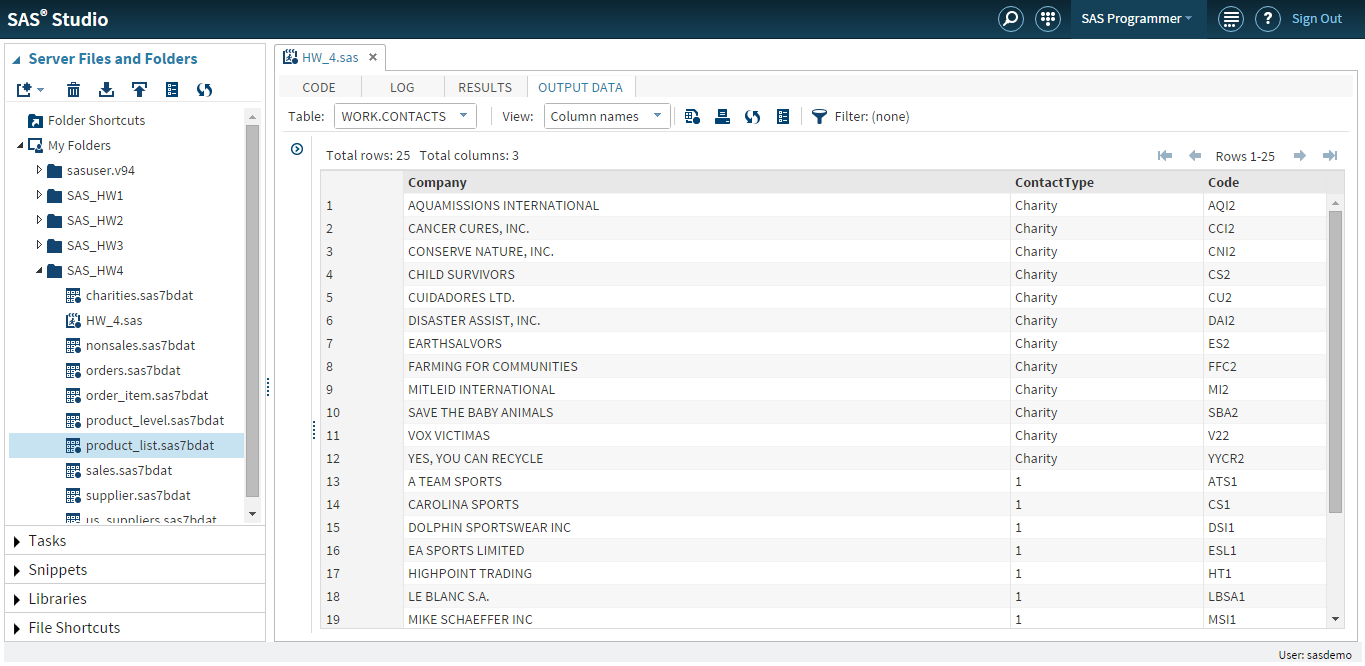
/\* Problem 2(a) \*/

data contacts;

set SAS\_HW4.charities SAS\_HW4.us\_suppliers;

run;

**Output Data**



1. PROC CONTENTS step to examine **work.contacts**

**Code**

/\*Program 2.(b)\*/

/\*The variable attributes are assigned from the first input data set (Charities)\*/

proc contents data=contacts;

title "Examining the data set";

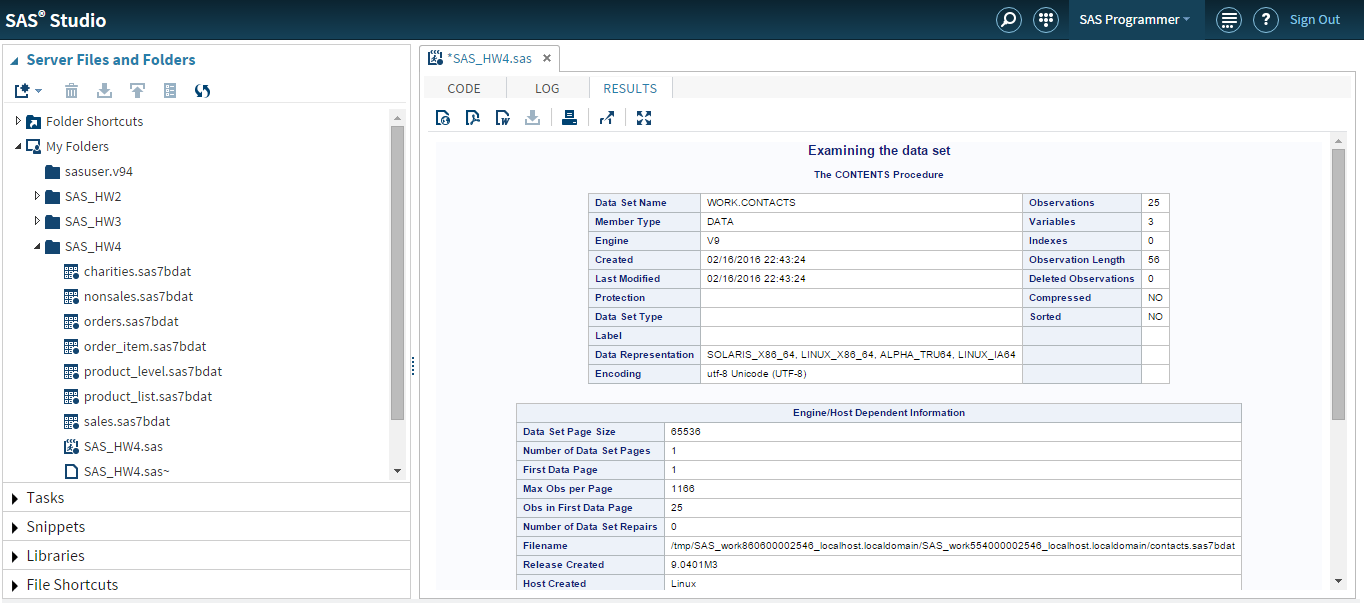
run;

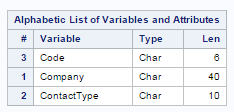
**Comments**

The variables attributes are assigned in the order as same as the order of attributes from the first input data set **charities**

We could also note from the screenshot that the attribute length is dependent on the first variable given in the ‘Set’ statement.

**Output Data**





1. DATA step to concatenate **us\_suppliers** and **charities**

**Code**

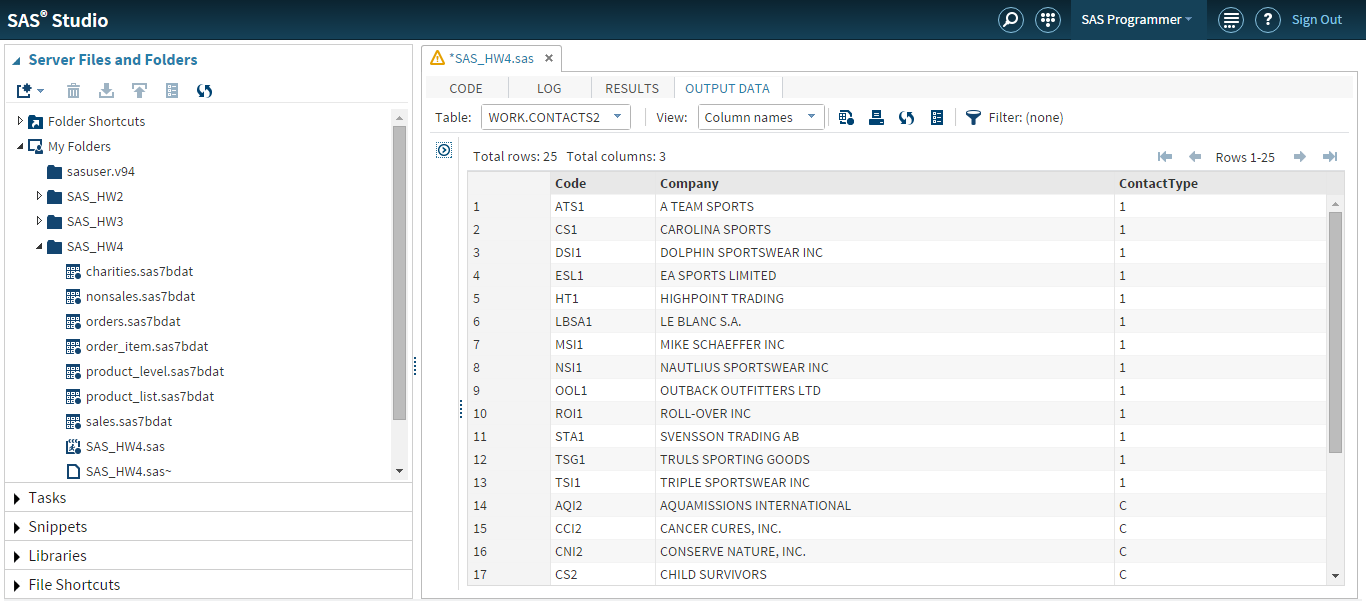
/\* Problem 2(c) \*/

data contacts2;

set SAS\_HW4.us\_suppliers SAS\_HW4.charities;

run;

**Output Data**



1. PROC CONTENTS step to examine **work.contacts2**

**Code**

/\*Program 2.(d)\*/

/\*The variable attributes are assigned from the first input data set (us\_suppliers)\*/

proc contents data=contacts2;

title "Examining the data set";

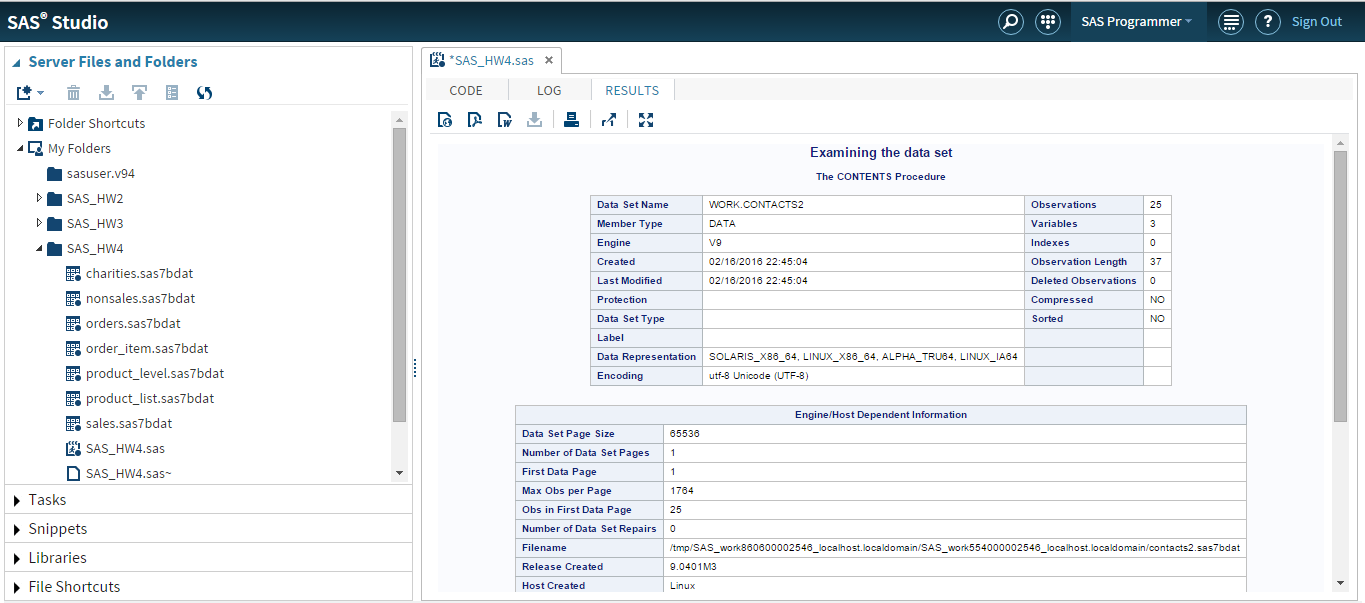
run;

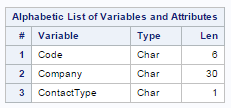
**Comments**

The variables attributes are assigned in the order as same as the order of attributes from the input data set **suppliers.**

As we had noted in 2(b), the attribute length depends on the first variable given in the ‘Set’ statement. Thus, the data gets truncated when length of the attribute from first variable is less than the second one. For example, ‘Contact Type’ data for ‘Charity’ is truncated as ‘C’.

**Output Data**





**Problem 3**

1. Data set – Merge order and order\_times

**Code**

/\* Problem 3(a) \*/

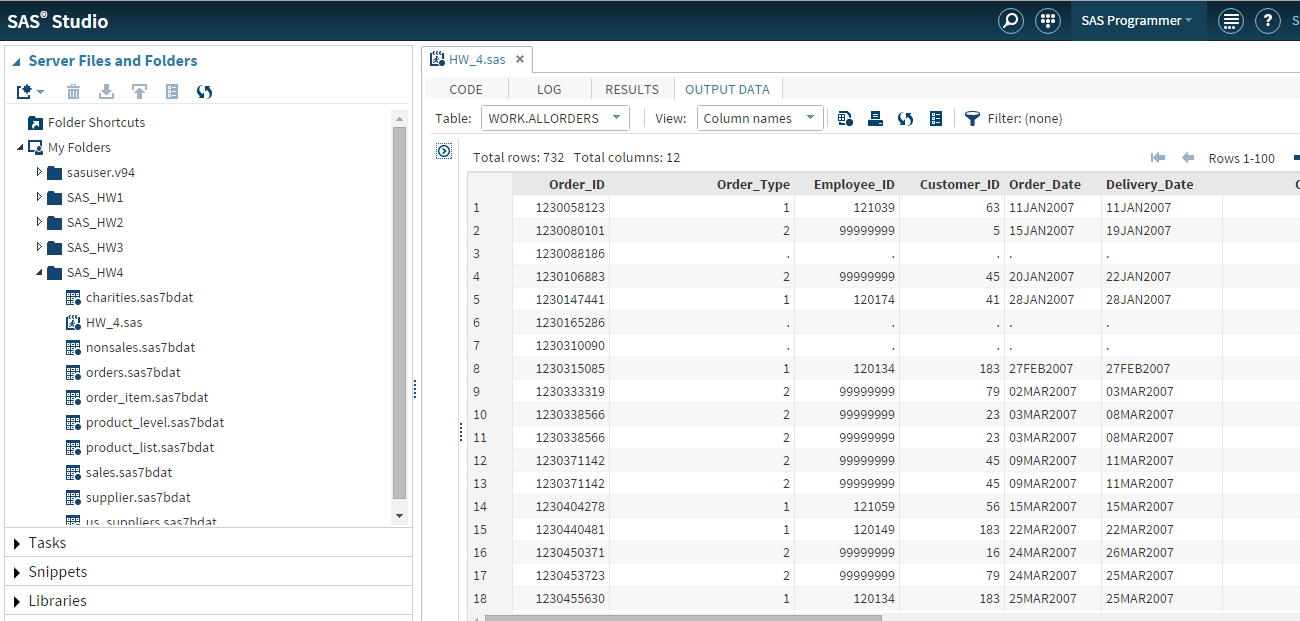
data work.allorders;

merge SAS\_HW4.orders SAS\_HW4.order\_item;

by order\_id;

run;

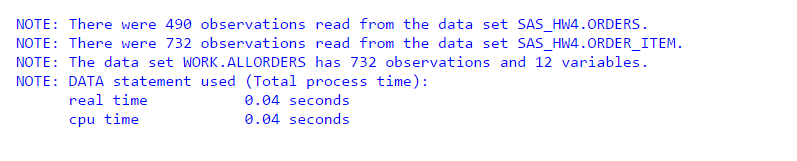
**Output Data**



1. **Work.all\_orders** Summary

The data set work.all\_orders is created with 732 observations and 12 variables.

**Output Data**



1. Subsetting the data set

**Code**

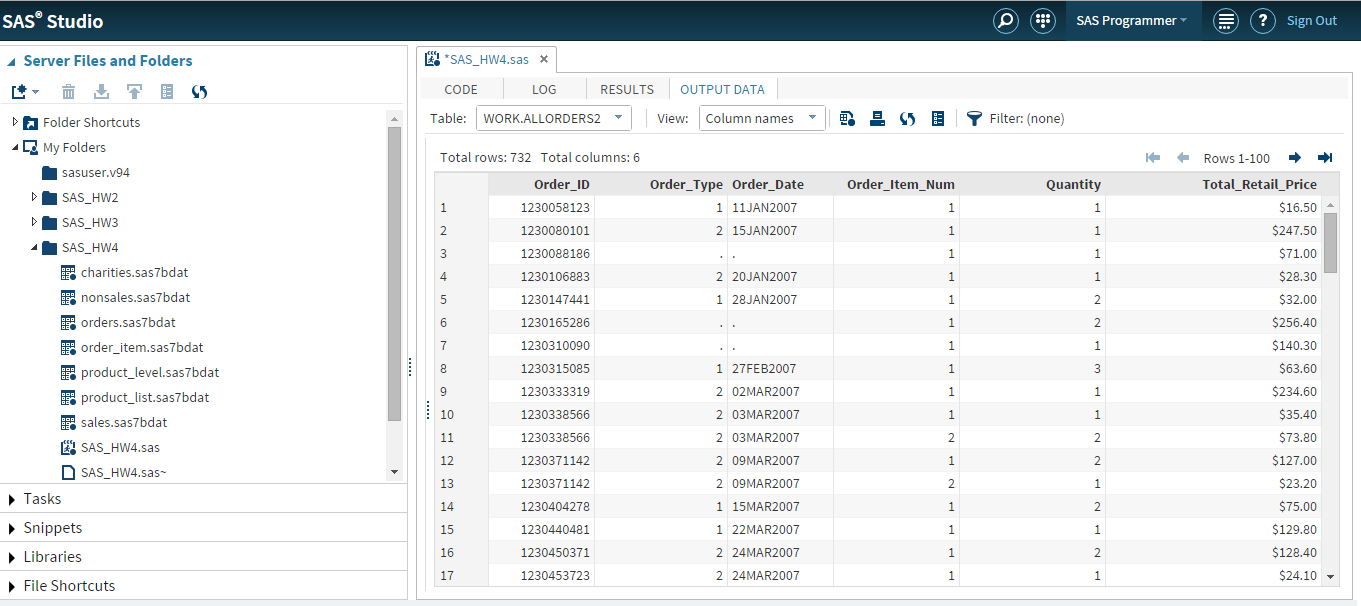
/\* Problem 3(c) \*/

data allorders2 (keep=Order\_ID Order\_Item\_Num Order\_Type Order\_Date Quantity Total\_Retail\_Price);

set allorders;

run;

**Output Data**



**Problem 4**

1. Sort Product\_list by Product\_level

**Code**

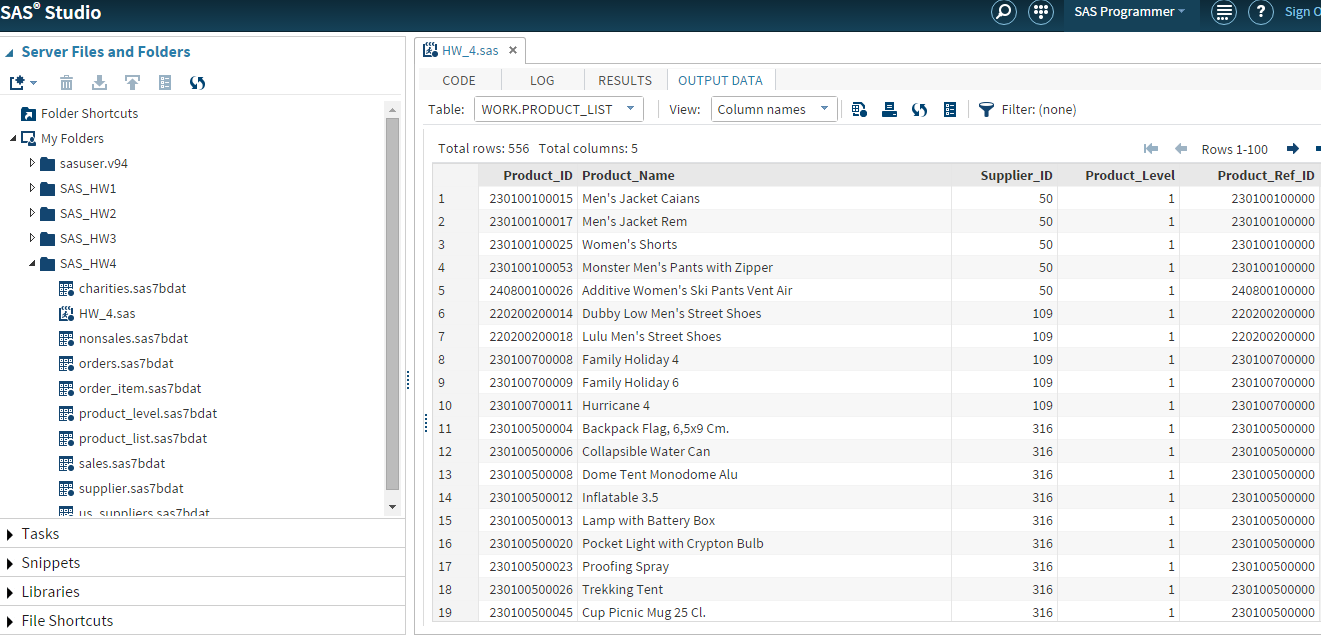
/\* Problem 4(a) \*/

proc sort data = SAS\_HW4.product\_list out=product\_list;

by product\_level;

run;

**Output Data**



1. Merge Product\_level with Product\_list

**Code**

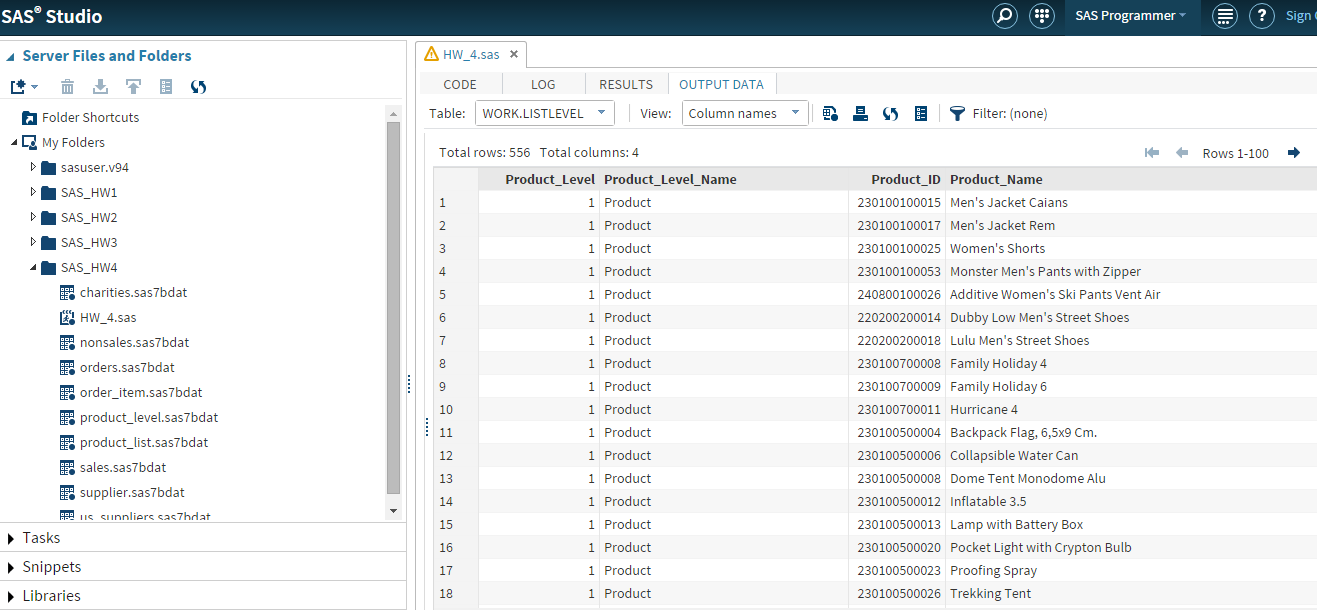
/\* Problem 4(b) \*/

data listlevel(keep=Product\_ID Product\_Name Product\_Level Product\_Level\_Name);

merge SAS\_HW4.Product\_Level product\_list; by Product\_Level;

run;

**Output Data**



1. Print data set with product\_level equal to 3

**Code**

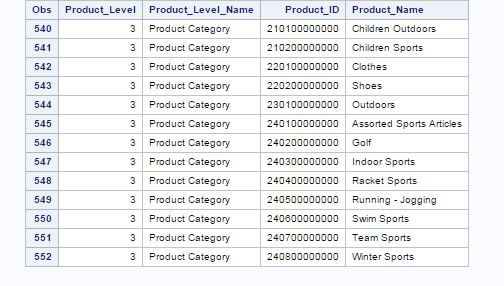
/\* Problem 4(c) \*/

proc print data = work.listlevel;

where product\_level=3;

run;

**Output Data**



**Problem 5**

1. Merge **product\_list** and **supplier** by **Supplier\_ID**

**Code**

/\* Problem 5(a) \*/

proc sort data=SAS\_HW4.product\_list; by supplier\_id; run;

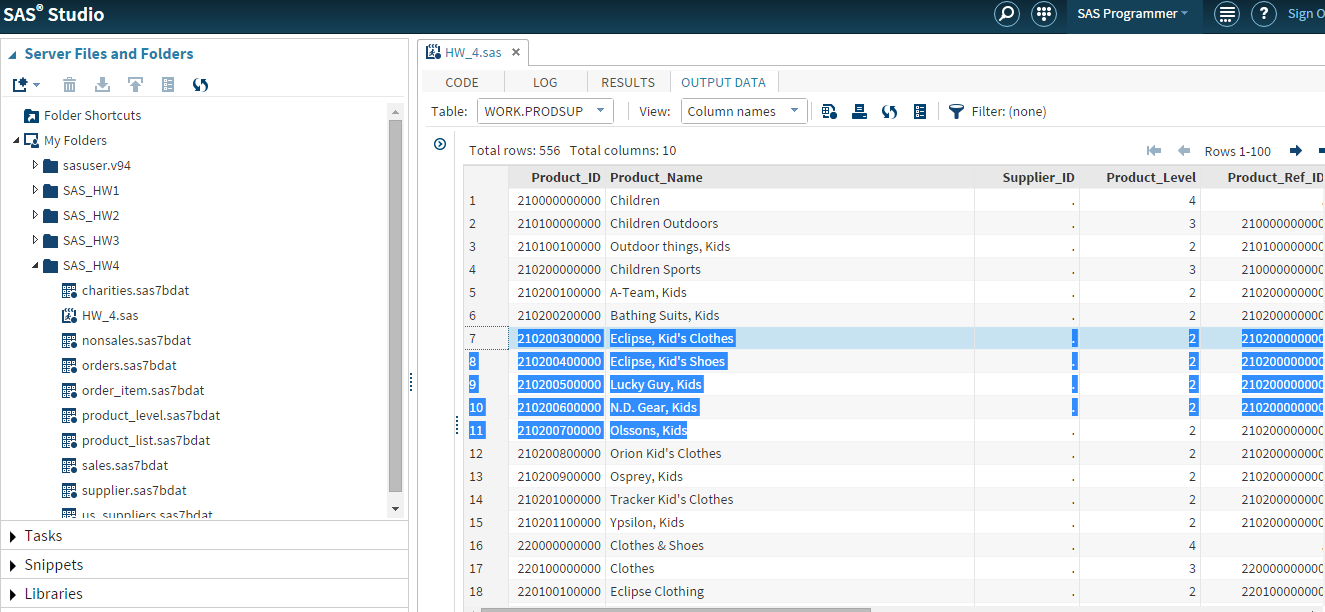
proc sort data=SAS\_HW4.supplier; by supplier\_id; run;

data work.prodsup;

merge SAS\_HW4.product\_list SAS\_HW4.supplier;

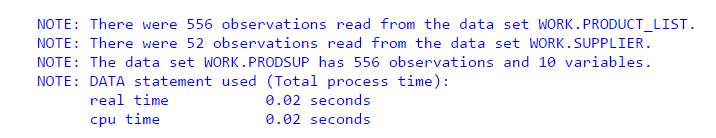
by supplier\_id;

**Output Data**



1. The data set was created with 556 observations and 10 columns

**Output Data**



1. Data set with observations from only product\_list not suppliers

**Code**

/\* Problem 5(c) \*/

data prodsup;

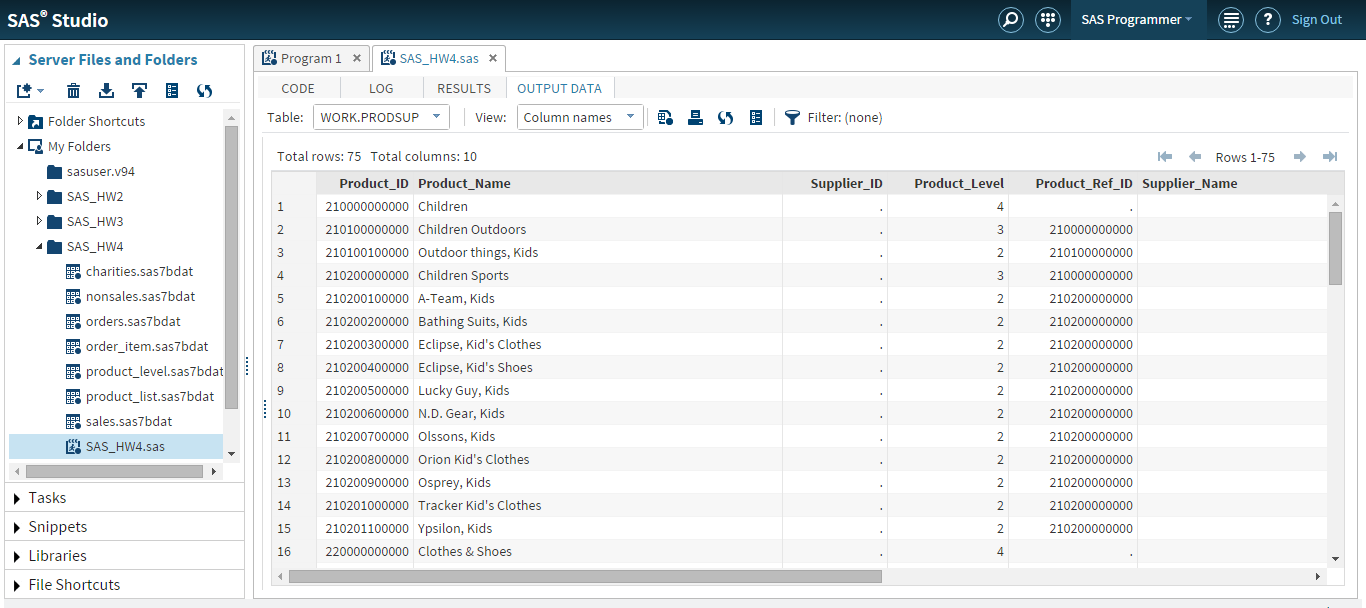
merge SAS\_HW4. product\_list(in=product\_list) supplier(in=supplier);

by supplier\_id;

if product\_list=1 and supplier=0;

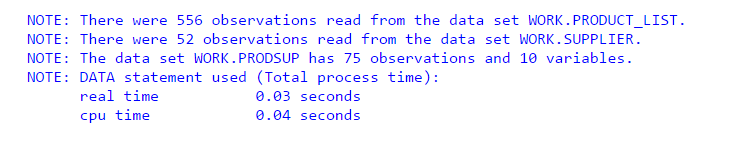
run;

**Output Data**



1. The data set was created with 75 observations and 10 columns

**Output**



1. Report using **PROC PRINT**

**Code**

/\*Program 5.(e)\*/

proc print data=prodsup;

title "Product List Observation";

run;

**Output Data**

