

Many ways to solve a SAS problem

Exercise for the SHRUG Winter 2013 Meeting

You have a data set containing demographic information for a group of clients (customers, patients), including household income.

```
The CONTENTS Procedure
Data Set Name: WORK.COHORT                Observations:    1428
Member Type:  DATA                       Variables:        5

-----Alphabetic List of Variables and Attributes-----

#    Variable    Type    Len    Pos    Format    Label
-----
4    AGE          Num     8     16           Age (yrs) as of diagnosis date
2    DIAG          Num     8      8    DATE9.    CRC Diagnosis Date
1    PATIENT_ID    Num     8      0           Patient ID
3    SEX           Char    1     32    $SEXF.    Gender: M/F
5    INCOME        Num     8     24           Household Income (median for DA)
```

Sample printout of the client demographics data

Obs	ID	AGE	SEX	INCOME
1	4839	82	F	28390
2	4980	81	M	32585
3	5086	80	F	19916
4	5396	88	M	37543
5	5416	71	M	33836
6	6118	84	F	29611
7	6610	70	M	53396
8	6945	77	M	55838
9	7062	84	F	46139
10	7482	76	M	37643

You also have a data set with one record containing the 25th, 50th, and 75th percentiles for income for the group (cohort).

```
The CONTENTS Procedure
Data Set Name: WORK.SESQUART              Observations:    1
Member Type:  DATA                       Variables:        3

-----Alphabetic List of Variables and Attributes-----

#    Variable    Type    Len    Pos    Label
-----
1    Pctl_25      Num     8      0    the 25.0000 percentile, income
2    Pctl_50      Num     8      8    the 50.0000 percentile, income
3    Pctl_75      Num     8     16    the 75.0000 percentile, income
```

Quartiles for Average Household Income in COHORT

Pctl_25	Pctl_50	Pctl_75
29721	36775	44924

You need to assign an income quartile to each client using SAS.

How would you do it? Remember – there are no “wrong” answers. Please send example code to shrugexec@gmail.com. We’ll discuss any solutions anonymously, unless you want us to use your name.