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| **IDS 462 STATISTICAL SOFTWARE FOR BUSINESS** | |
| **HOMEWORK 3 – Part 1** | |
|  | **TEAM MEMBERS**: |
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Problem 1.4 - SAS program for IQ calculation

a) Create variables OVERALL and GROUP

Input 001128550590 002102490501 003140670690 004115510510

Code /\*Part A\*/

data iq\_and\_test\_scores; input ID 1-3

IQ 4-6 MATH 7-9

SCIENCE 10-12;

OVERALL = ((IQ+MATH+SCIENCE)/500); If IQ<=100 then GROUP = 1;

Else if IQ<=140 then GROUP = 2; Else /\*if IQ>140 then \*/ GROUP = 3;

Datalines;

001128550590

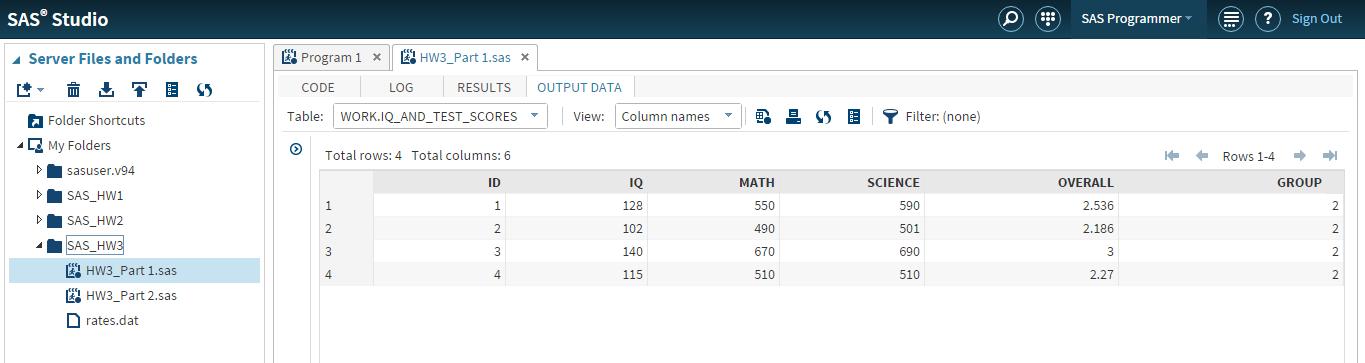
002102490501

003140670690

004115510510

;

Output Data

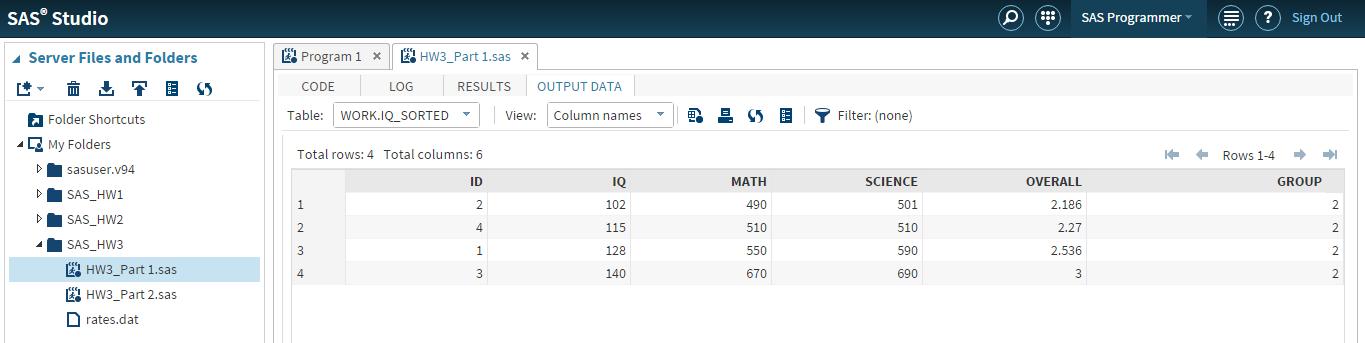


b) List data set in order of IQ

Code /\*Part b\*/

proc sort data=iq\_and\_test\_scores out=iq\_Sorted; by IQ; run;

Output Data



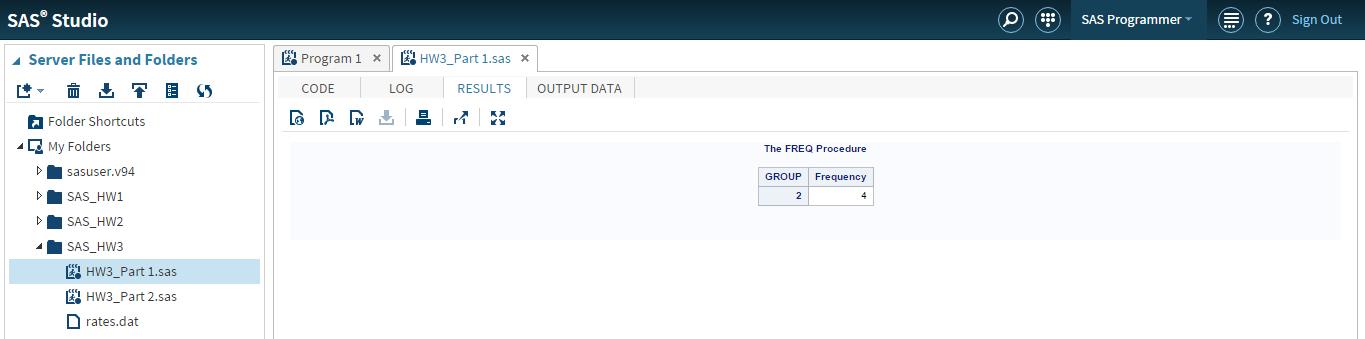
c) Frequencies for GROUP

Code /\*Part C\*/

proc freq data = iq\_and\_test\_scores;

tables GROUP/Out=IQ\_Scores\_Frequency nocol norow nocum nopercent; run;

Output Data



Problem 1.8 - Create a SAS program to calculate the BONUS and NEW\_SALARY

Input

137 28000 1

214 98000 3

199 150000 3

355 57000 2

Code

/\* Problem 1.8 \*/ Data emp\_salary;

input EMPID SALARY JCLASS;

If Jclass = 1 then BONUS = 0.1\*SALARY;

Else If Jclass = 2 then BONUS = 0.15\*SALARY; Else BONUS = 0.2\*SALARY;

NEW\_SALARY = SALARY + BONUS; Datalines;

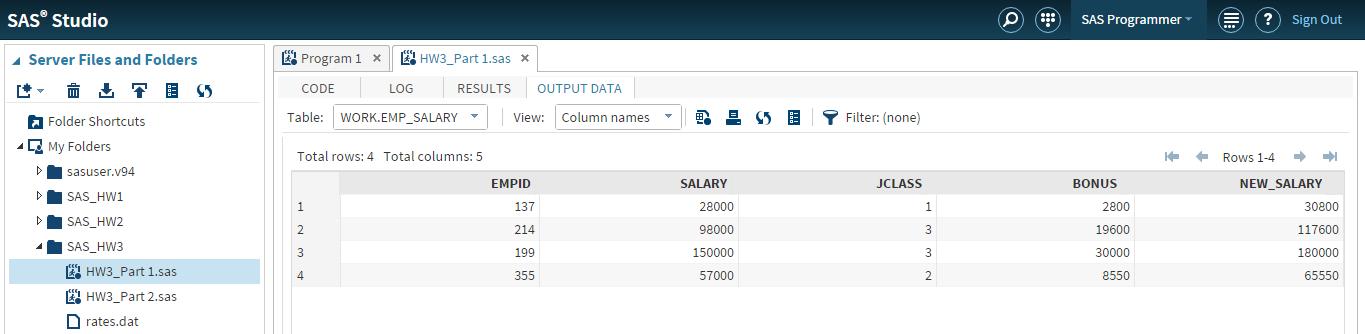
137 28000 1

214 98000 3

199 150000 3

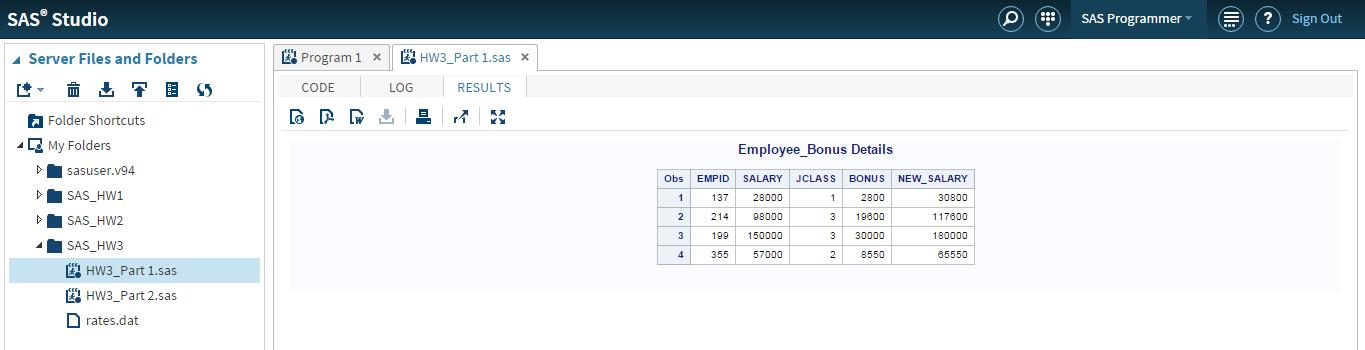
355 57000 2;

Output Data



To print the details:

proc print data=emp\_salary; title "Employee\_Bonus Details"; run;



Problem 12.8 – Write a SAS data step to read lines of data and create a temporary SAS data set

Input

\*\*\*Header line: ID GENDER DOB SCORE1 SCORE2 001 M 10/10/1976 100 99

002 F 01/01/1960 89

003 M 05/07/2001 90 98

Code

/\*Problem 12.8\*/ data prob12\_8;

infile datalines delimiter='20'x dsd missover firstobs=2; input id\_number $

gender $

dob :mmddyy. score1 score2;

format dob date9.; datalines;

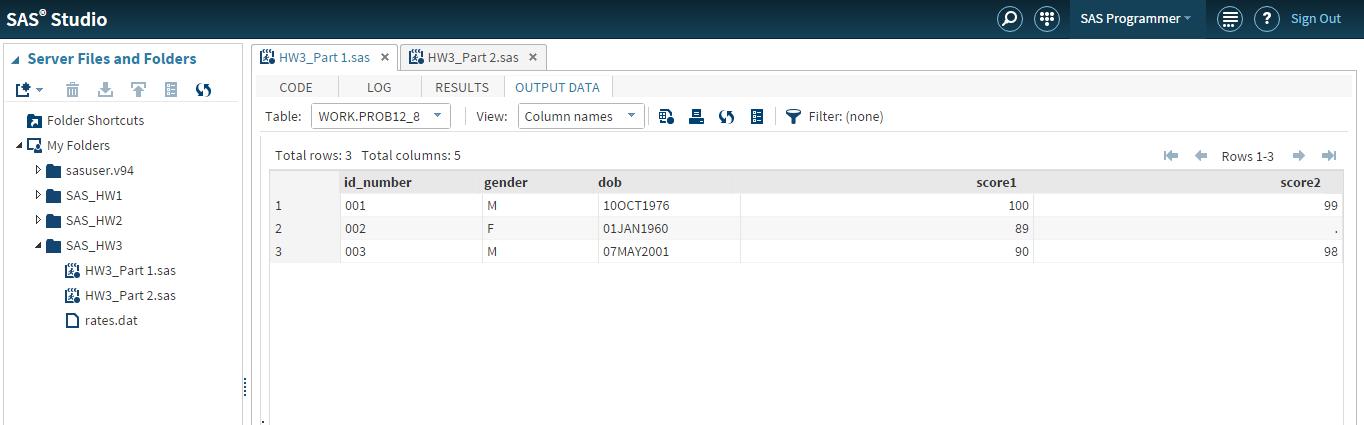
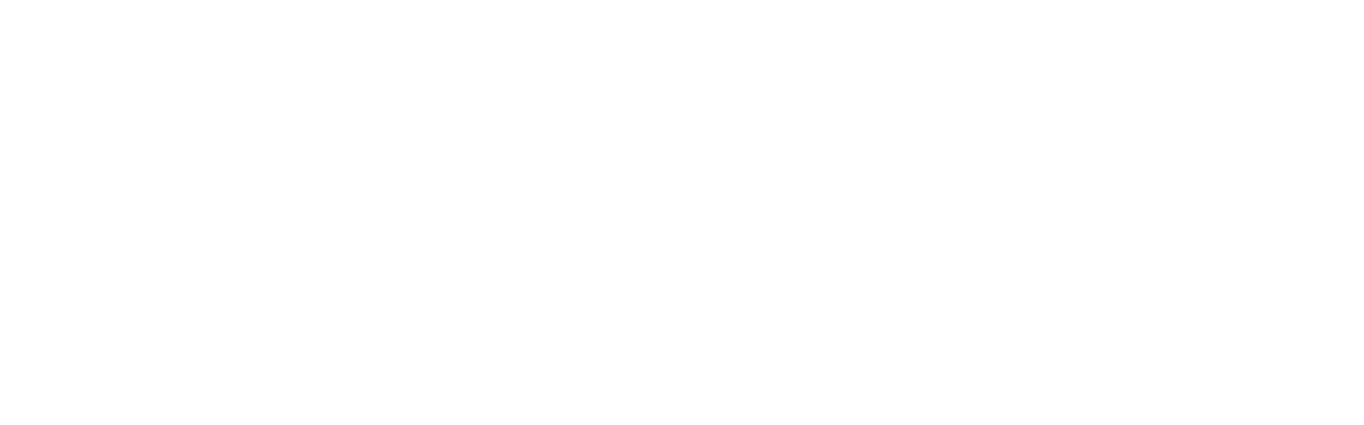
\*\*\*Header line: ID GENDER DOB SCORE1 SCORE2 001 M 10/10/1976 100 99

002 F 01/01/1960 89

003 M 05/07/2001 90 98

;

Output



Problem 12.16 – SAS data set to read the given data

Input

001,M,06/14/1944

68,155

002,F,12/25/1967

52,99

003,M,07/04/1983

72,128

Code

/\*Problem 12.16\*/ data read\_multi\_line;

infile datalines delimiter=',';

input #1 id gender $ dob :mmddyy. #2 height weight; cards;

001,M,06/14/1944

68,155

002,F,12/25/1967

52,99

003,M,07/04/1983

72,128

;

run;

Output

