SAS Data set for Q1: WORK.spend_income

Q1. Using the 'PROC RANK' to create a new table 'spend_income_1', in which two variables 'Spend' and 'Income' are bucketed into 3 ranked groups. The newly created ranks variables (bucket membership) for two columns are assigned names as 'Spend_gp' and 'Income_gp' respectively. Finally sorting the table 'spend_income_1' by the column 'Income_gp' (Check the result below)

	id	gender	Spend	Income	Rank for Variable Spend	Rank for Variable Income
1	4	F	41000	57000	0	0
2	6	F	48000	58000	1	0
3	1	M	30000	51000	0	0
4	2	M	33000	55000	0	0
5	3	M	37000	52000	0	0
6	7	F	52000	61000	1	1
7	8	F	53000	63000	1	1
8	9	F	50000	63000	1	1
9	11	F	53000	66000	1	1
10	13	F	57000	70000	2	1
11	10	M	49000	73000	1	1
12	14	F	67000	90000	2	2
13	15	F	79000	93000	2	2
14	5	M	45000	78000	0	2
15	12	M	55000	79000	2	2
16	16	M	65000	120000	2	2

SAS Data set for Q2: WORK.employee

Q2. Creating a new data set 'employee_rk'. Assign each observation a ranking order for field 'tenure' within each 'dep_id' group. You will use the 'PROC RANK' with 'DESCENDING' option but without 'GROUPS=' option. Since there are too many employees with 5 years tenure, you will use the 'TIES=LOW' option. Observe your result and explain the ranking order for the employees with tenure=5 within each 'dep_id' group. Also verify and explain the results if you use the TIES=HIGH' but without 'DESCENDING' option.