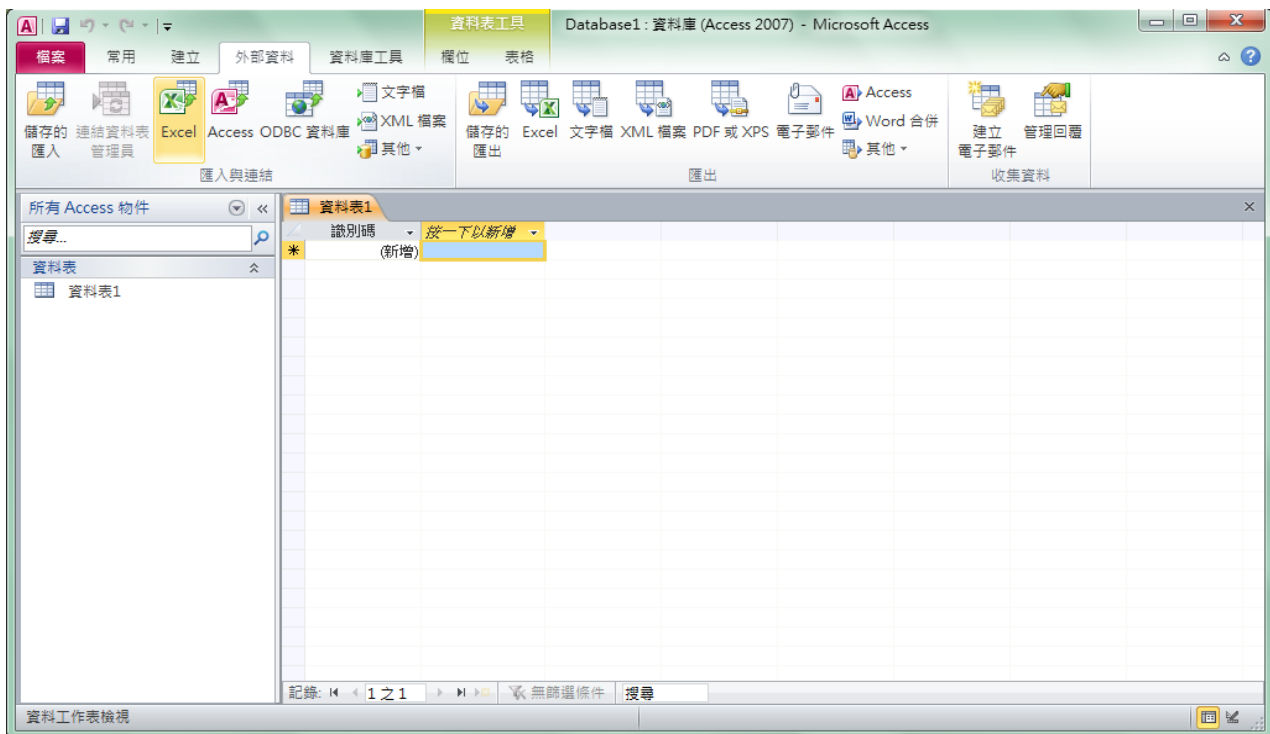
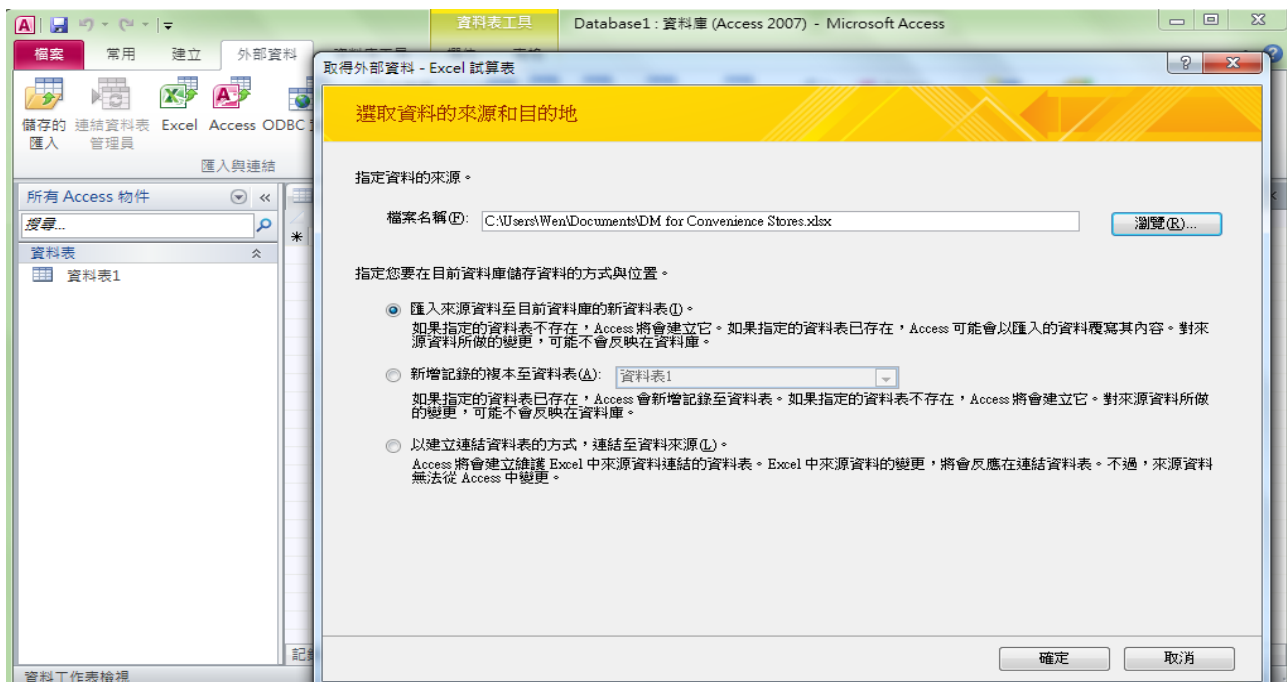


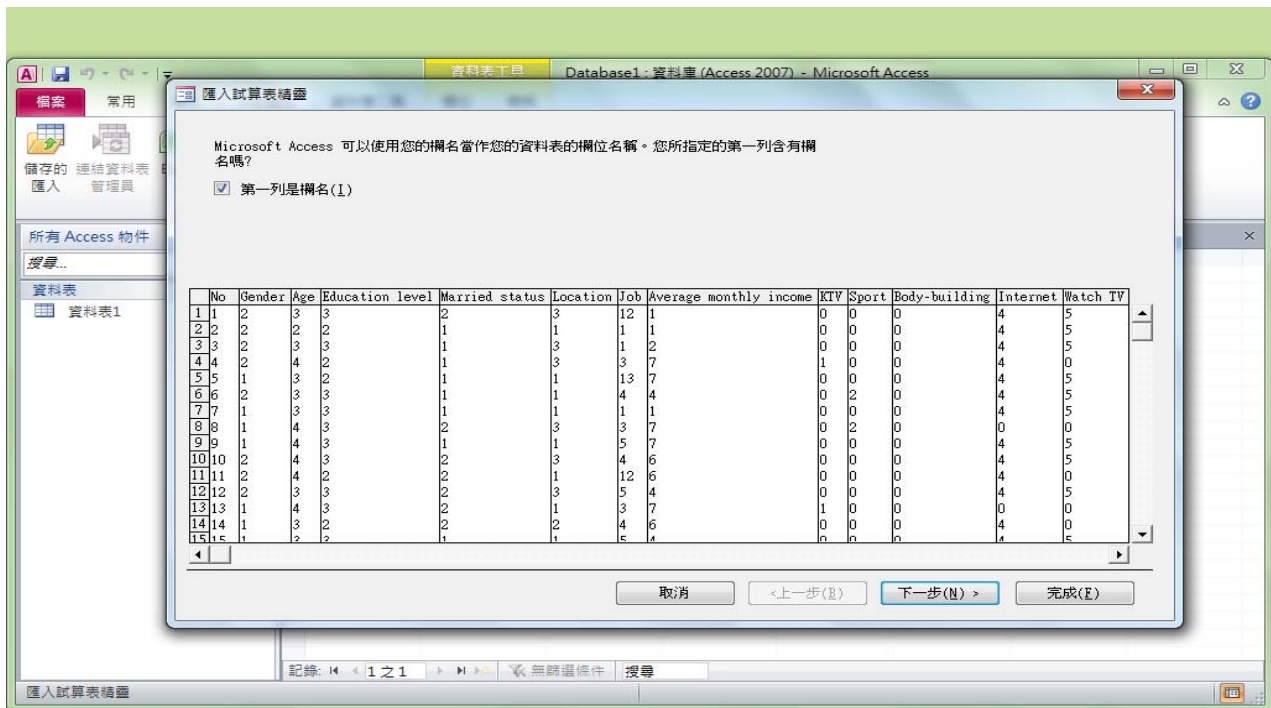
## Clustering — K-means instruction on SPSS Modeler



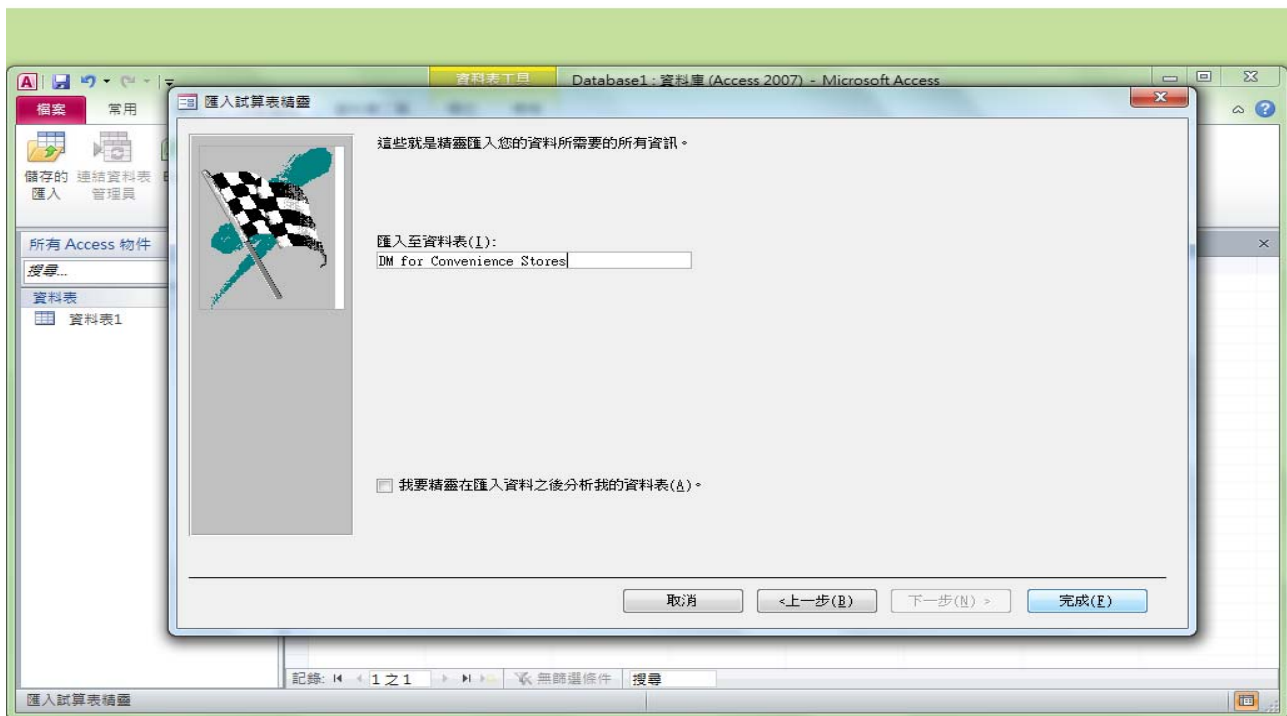
Import data from Excel database to MS Access by selecting 【External data】 and 【Excel】 option.



Save .CSV file to a specific space on Disk after importing MS Excel to MS Access.



MS Access will generate a wizard to import data sheet.



Select specific column data from MS Access as the source data on database.

Database1: 資料庫 (Access 2007) - Microsoft Access

所有 Access 物件

DM for Convenience Stores

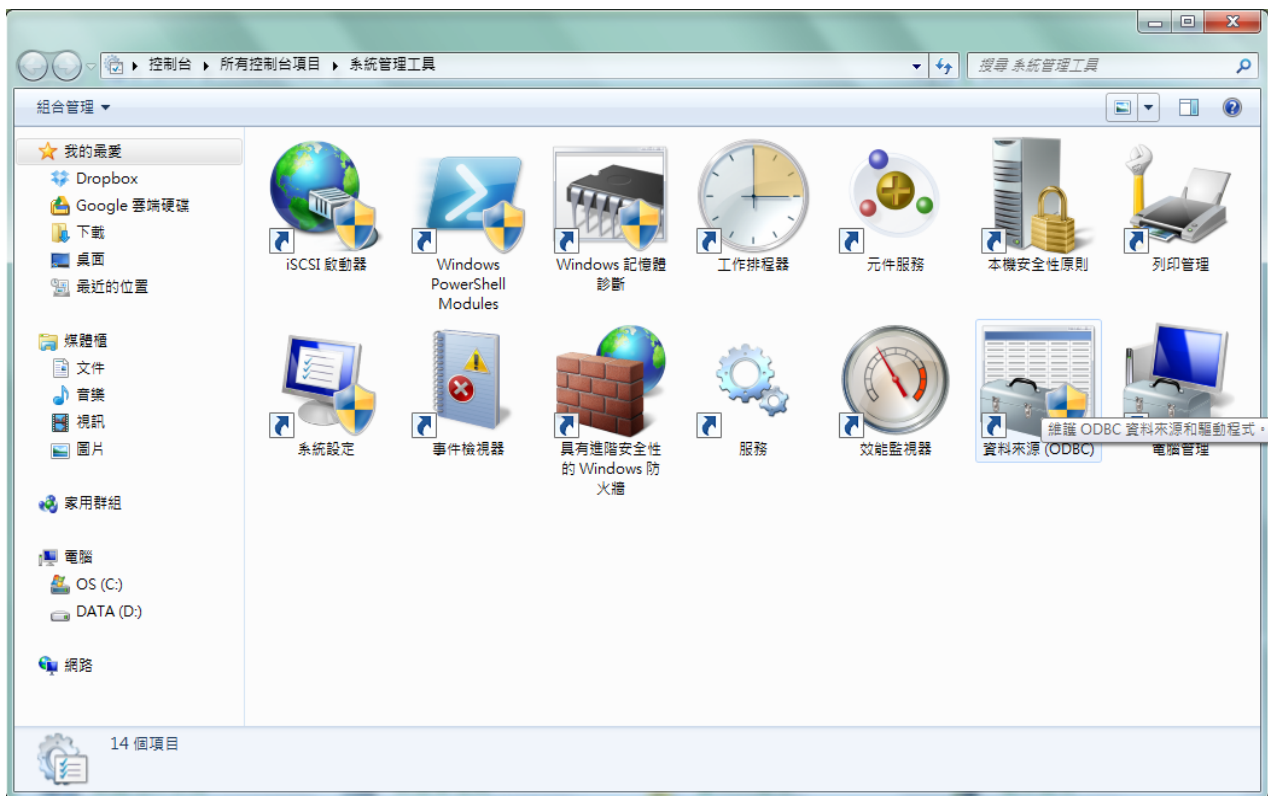
No	Gender	Age	Education level	Married status	Location	Job	Average month
10	2	4	3	2	3	4	6
11	2	4	2	2	1	12	6
12	2	3	3	2	3	5	4
13	1	4	3	2	1	3	7
14	1	3	2	2	2	4	6
15	1	3	3	1	1	5	4
16	1	3	4	1	3	6	4
17	2	3	3	2	3	12	1
18	2	4	2	2	3	5	6
19	2	4	3	2	3	6	7
20	2	3	3	1	1	2	4
21	2	3	3	1	1	4	4
22	1	2	3	1	2	1	1
23	2	2	3	1	2	1	1
24	1	4	3	2	4	8	5
25	2	3	2	1	1	4	2
26	1	4	3	2	3	3	7
27	2	3	3	1	3	4	4
28	2	3	3	1	1	2	5
29	2	2	2	1	3	1	2
30	1	3	3	1	2	6	4
31	2	2	2	1	3	1	1
32	2	4	2	2	2	5	4

記錄: 1200 之 1

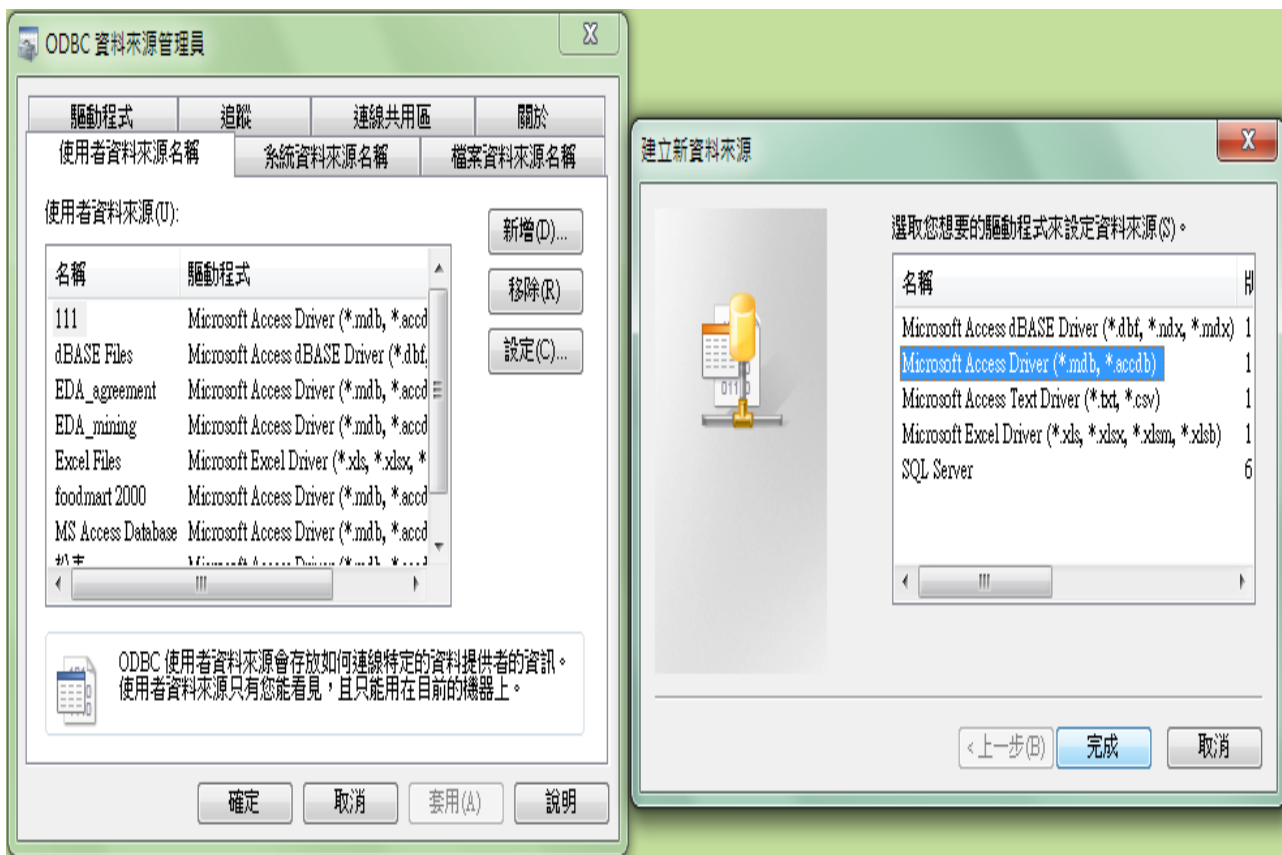
Once import column data to the MS Access file, we can see the content on a data table.



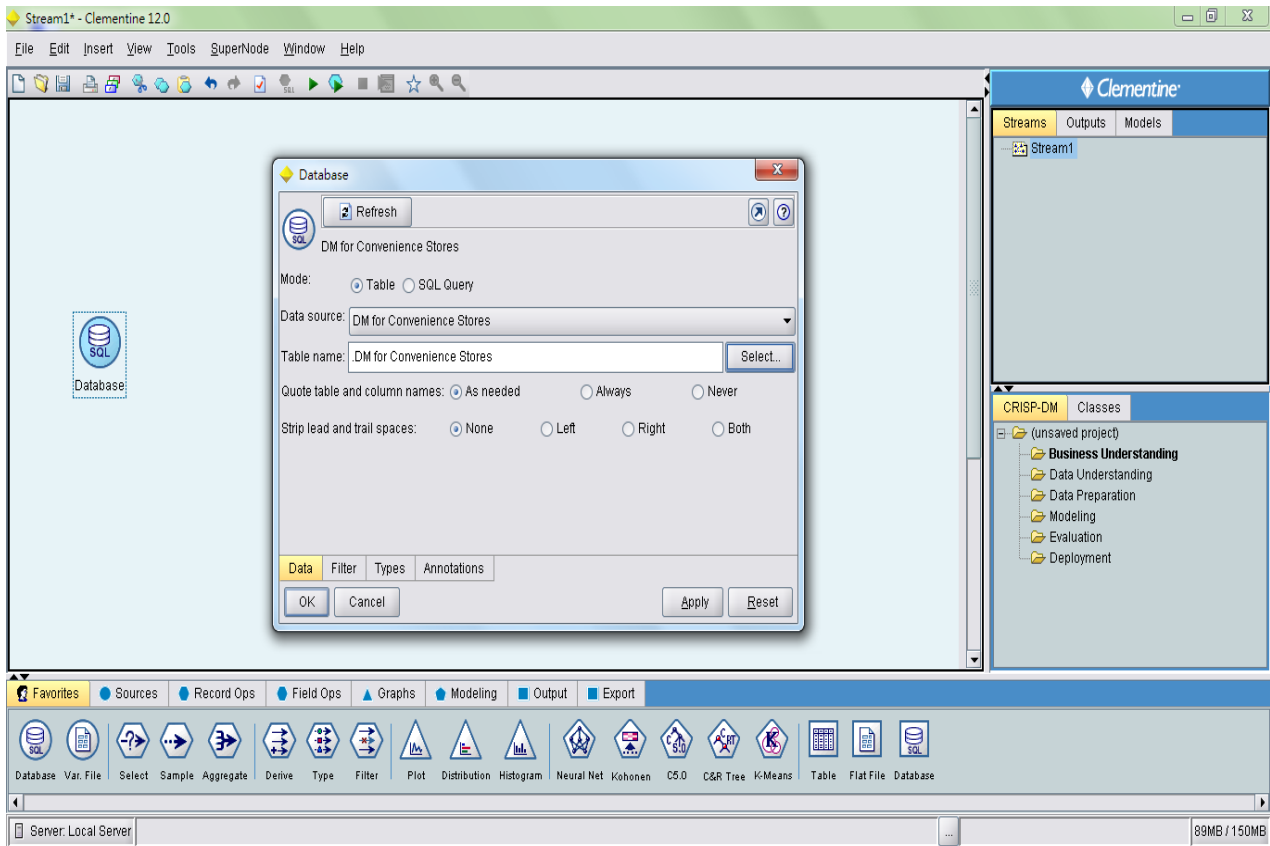
In order to connect MS Access file and ODBC, we select **【Control panel】** and **【System management tools】**.



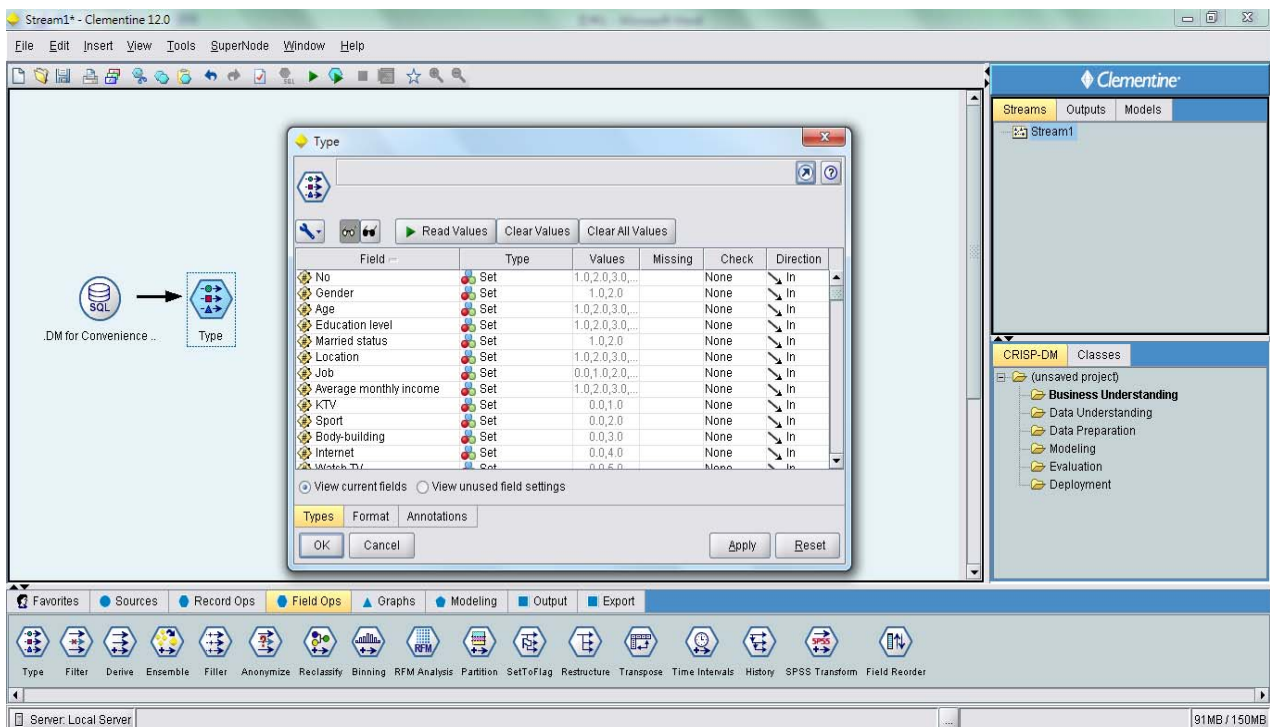
In **【System management tools】** , select **【Data source(ODBC)】** option.



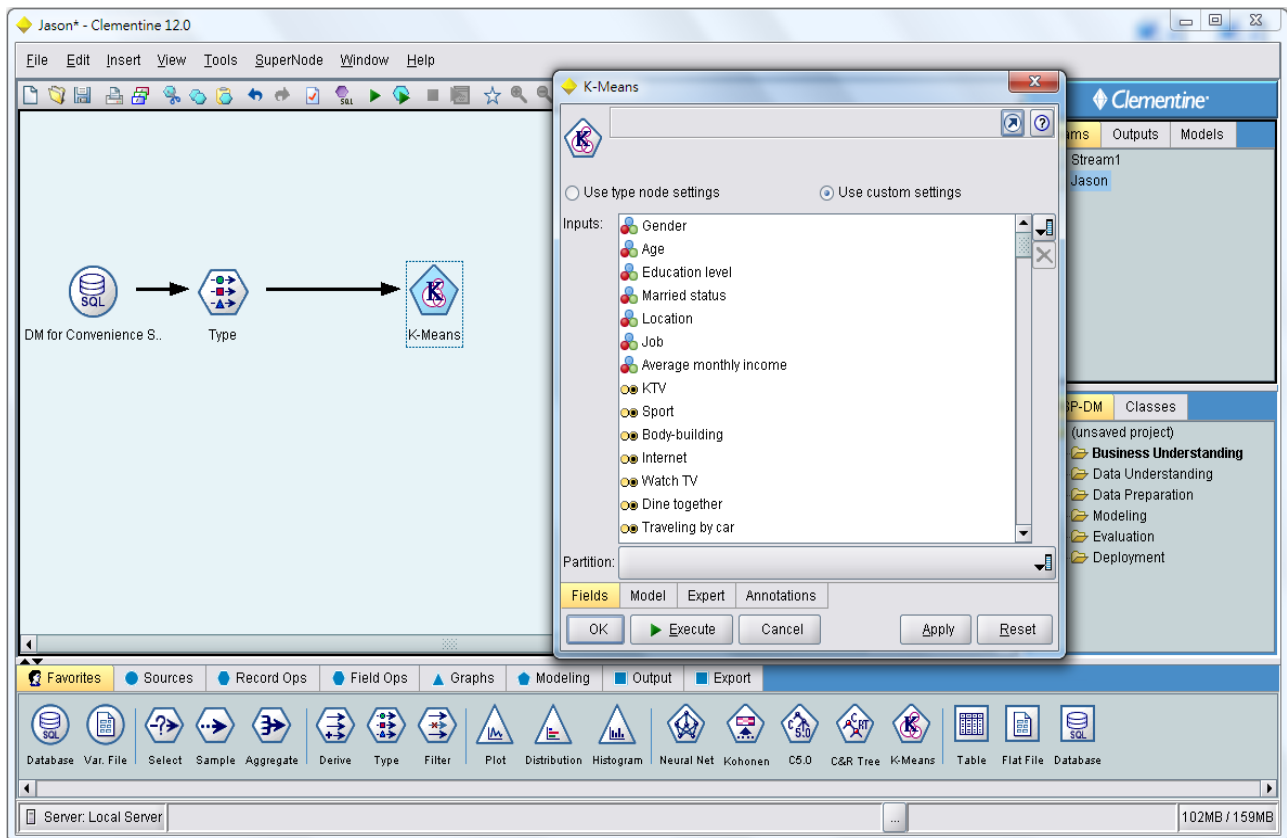
In ODBC option, select target data file.



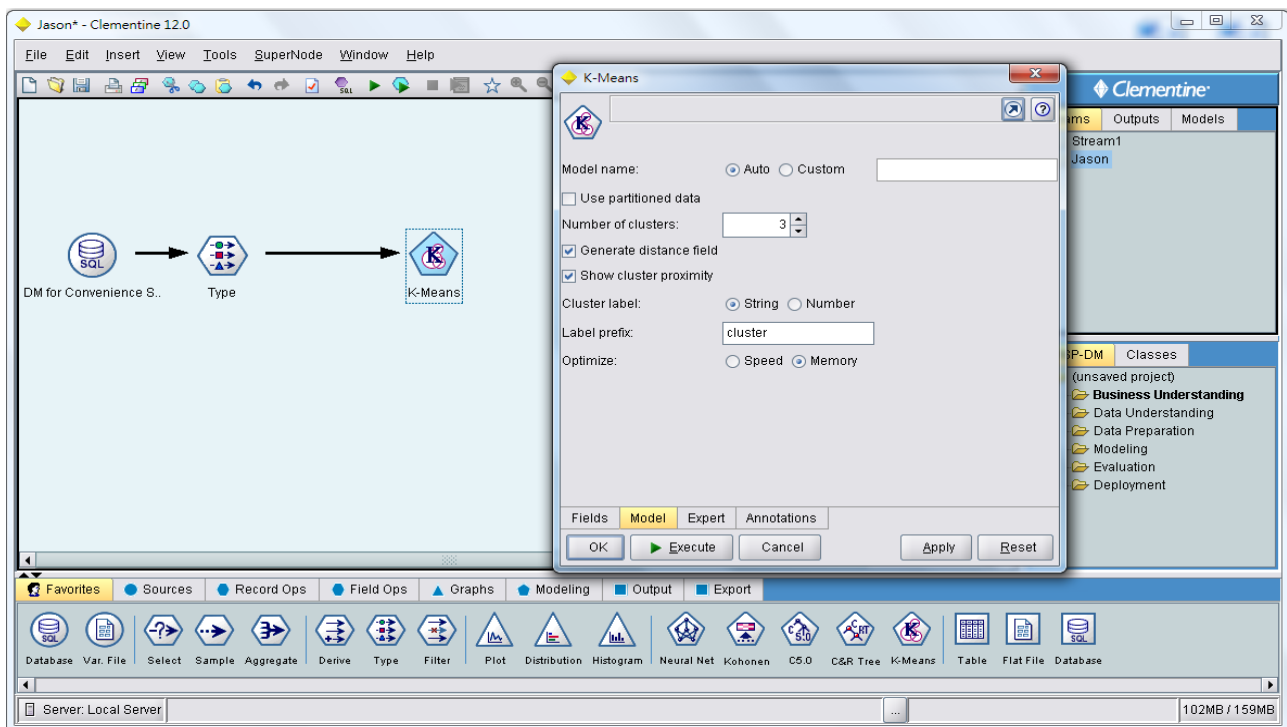
Then, ODBC connection is completed and select specific database for data analyzing.



In SPSS Modeler, select **【Type】** node in order to identify data format for further data analysis.

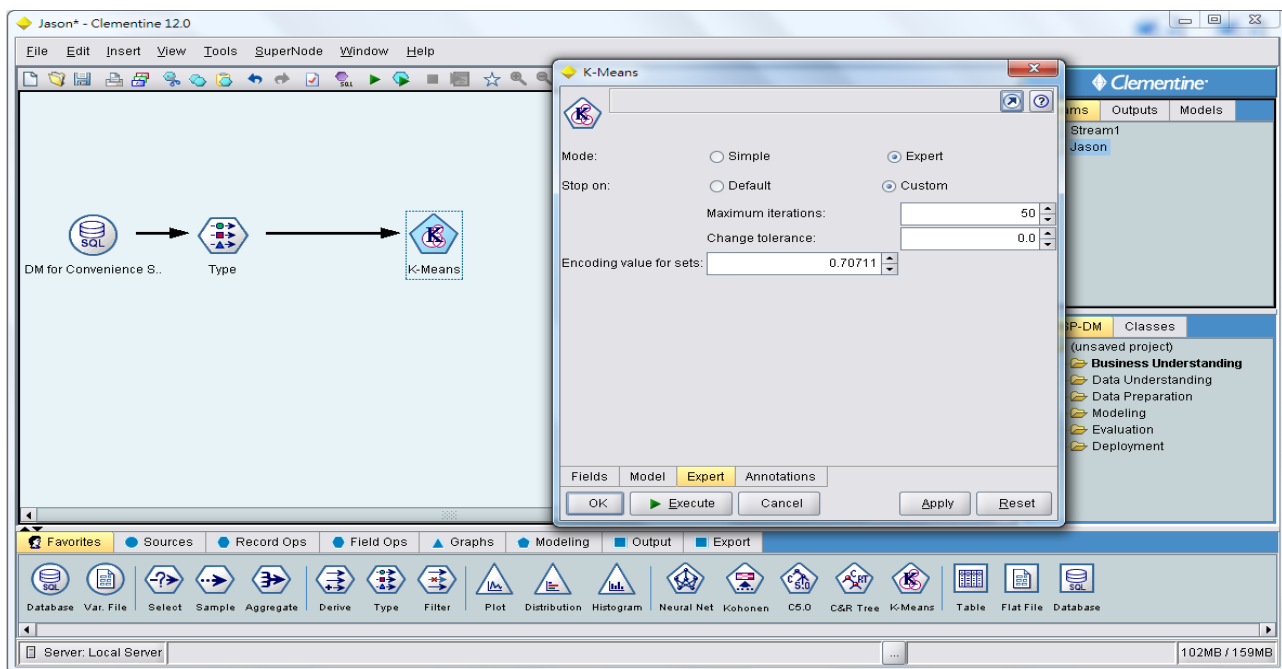


Select K-Means algorithm node and variables. ◦

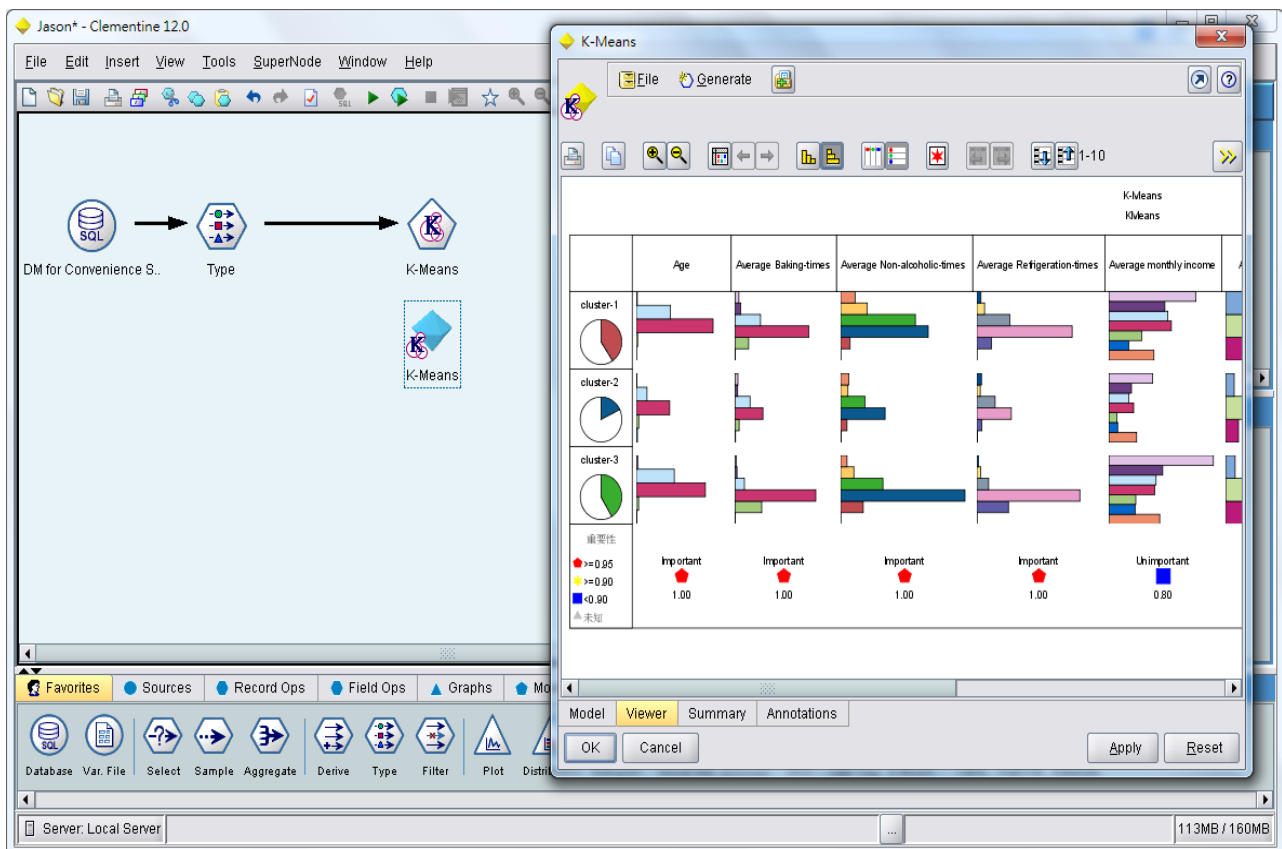


Complete K-Means variables setting and clustering numbers for analysis.





During the calculation setting, initial default value for calculation times is 50 times and distance deviation value is not to exceed 0.000001.



After execute K-Means algorithm node, we can generate a clustering analysis result on the right hand side diagram.

K-Means



After a whole K-Means algorithm node and variables calculation, the final analysis result is illustrated as the above figure.