

How do you input data for linear regression in SPSS?

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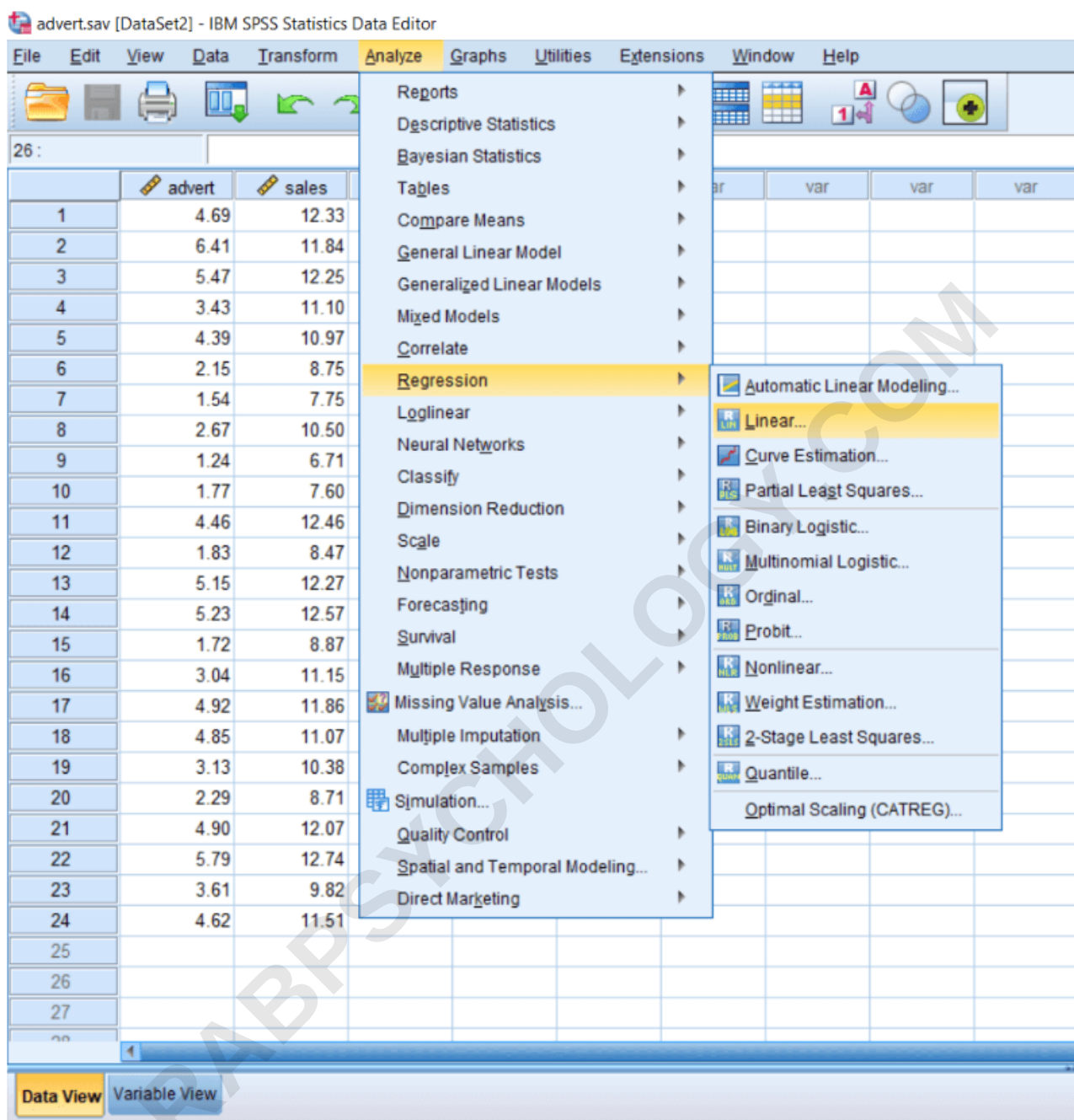
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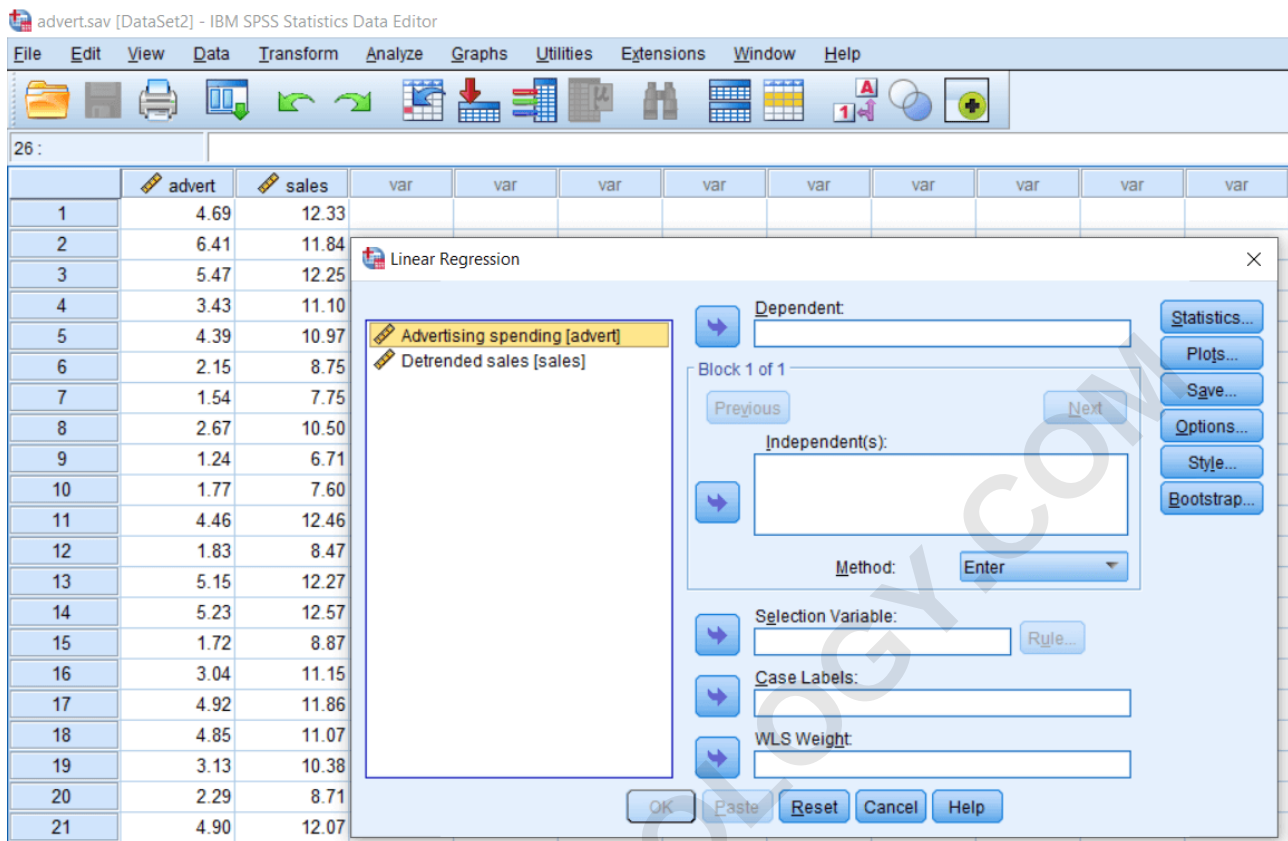
Linear regression is a statistical method commonly used for analyzing the relationship between two or more variables. In order to perform linear regression in SPSS, the first step is to input the data into the software. This can be done by creating a new dataset or importing an existing one. The data must be organized in a specific format with the independent variable(s) in one column and the dependent variable in another. Once the data is inputted, the linear regression analysis can be run by selecting the appropriate menu options and specifying the variables to be used in the analysis. The results will then be displayed, providing insights into the relationship between the variables and allowing for further statistical interpretation. Overall, inputting data for linear regression in SPSS involves following a specific format and utilizing the software's tools to perform the analysis efficiently and accurately.

Input of Linear Regression in SPSS

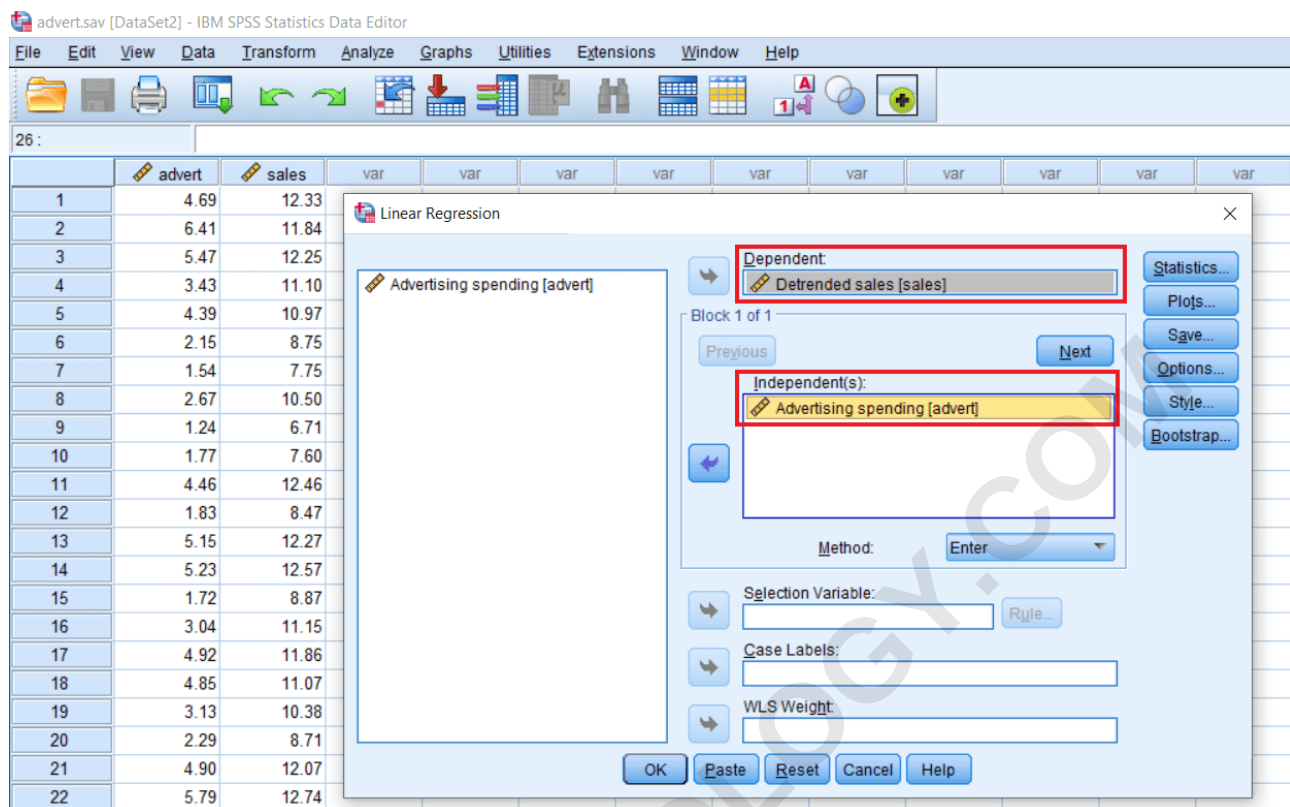
In this section, we are going to learn about the Input of Linear Regression in SPSS. To calculate the linear regression in SPSS, we will go to the Analyze menu and go to Regression and find out the Linear button like this:



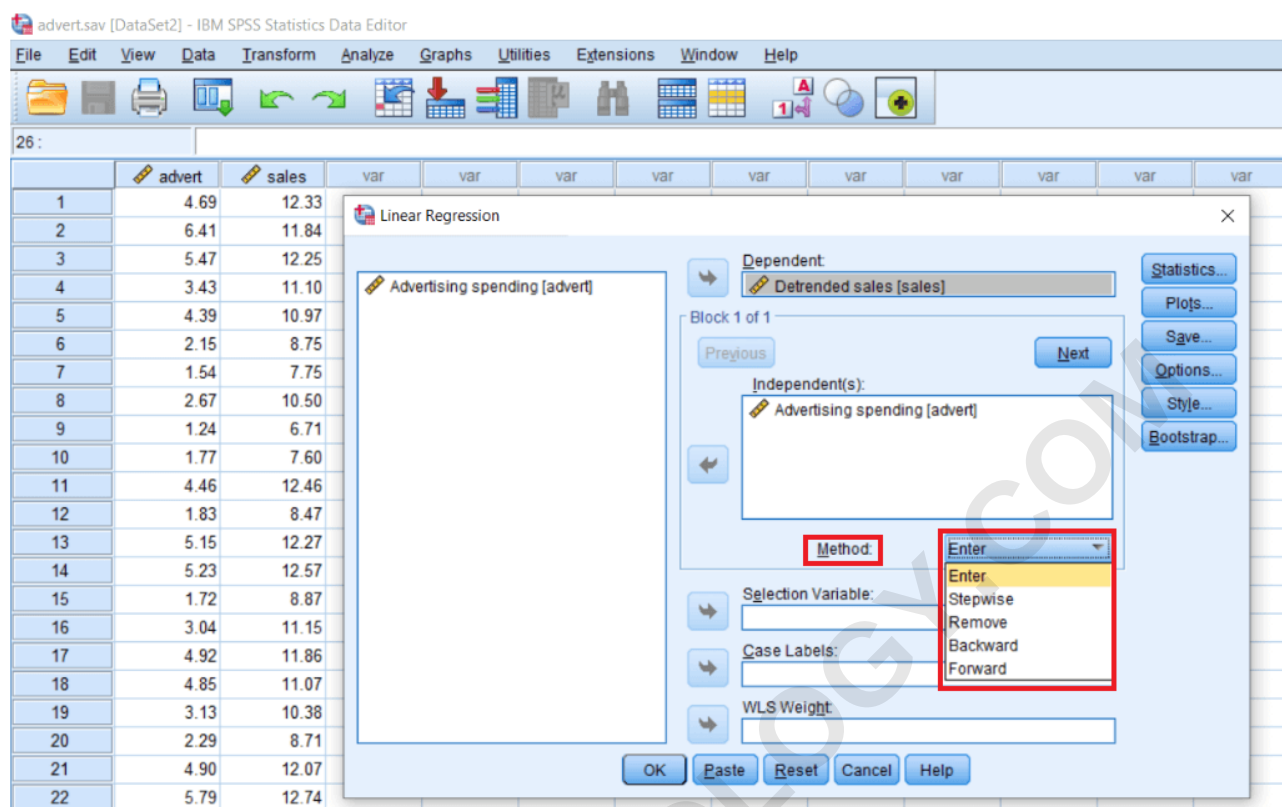
When we click on the Linear button, we will see a dialog box like this:



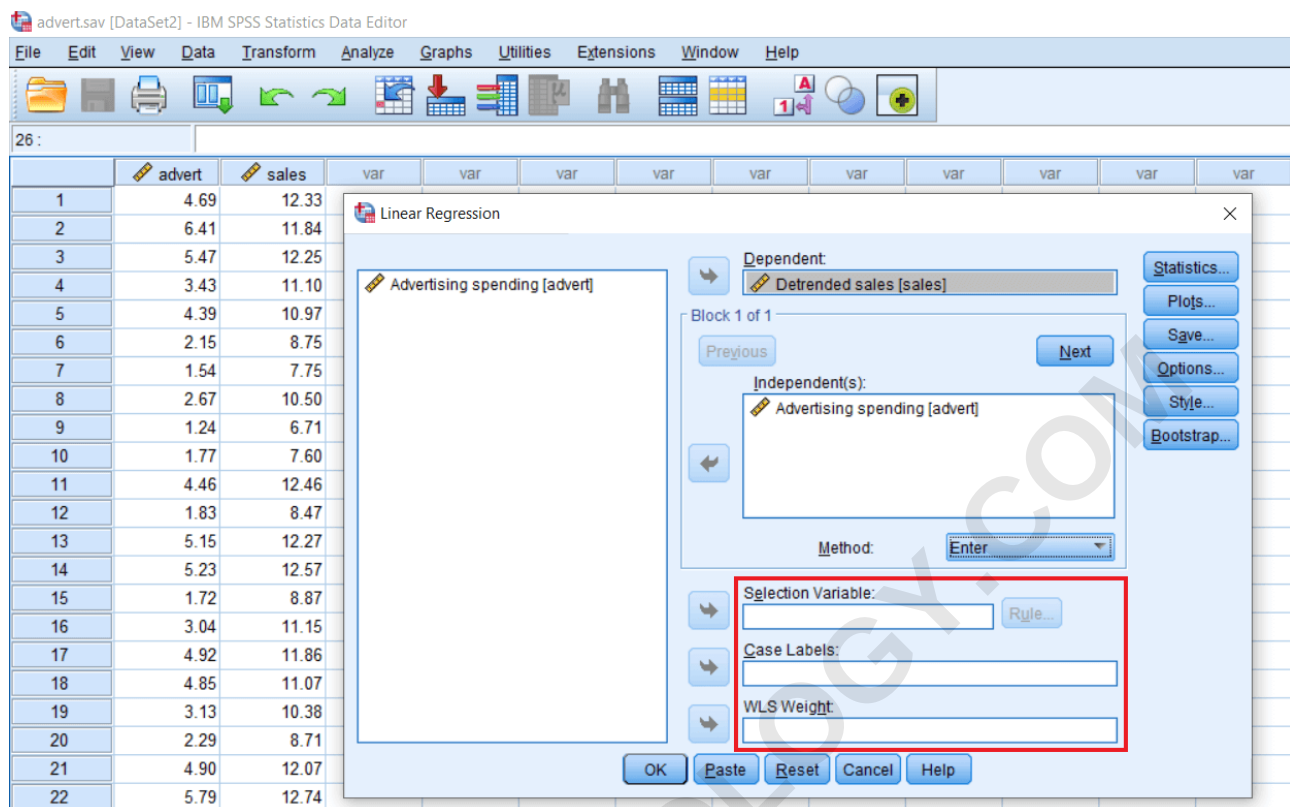
If we look at this dialog box, we will see all our variables listed on the left-hand side. We have one dependent box on the right-hand side. One dependent box means we can take only one dependent variable in the case of linear regression. In this case, we want to see the influence of advertisements on sales. We will make sales as a dependent variable, and advertisement will be our independent variable.



Again, there is a block option. By choosing the block option, we can see the effect of any other variable if we recode it on the dependent variable. We are currently doing linear regression. So, we will see the influence of only one variable on the dependent variable. We have some more options like method in which we have many methods like Stepwise, Remove, Backward, Forward.



We also have a selection variable, Case labels and WLS weight, but we will not study these options in this section. First, we want to see whether there is an influence or not between these two variables.



Again, we have some more options in the Statistics, Plots, Save, Options, Style and Bootstrapping. Initially, we are not going to do anything. We are just going to see the influence of the independent variable on the dependent variable. So, select our dependent variable and independent variable and click Ok. After this, we will see the following output:

IBM SPSS Statistics Viewer

SAVE OUTFILE='C:\Users\ASUS\Desktop\advert.sav'
/COMPRESSED.

REGRESSION
/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT sales
/METHOD=ENTER advert.

Regression

[DataSet2] C:\Users\ASUS\Desktop\advert.sav

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	Advertising spending ^a	.	Enter

a. Dependent Variable: Detrended sales
b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.916 ^a	.838	.831	.74197

a. Predictors: (Constant), Advertising spending

ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1	85.766	1	85.766	114.843	.000
Total	93.589	10			
Error	7.823	9	.869		

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