Do you know when your data is lying to you?
The Hands-On-Workshop of
Regression Analysis with Quantitative and Qualitative Variables

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https://github.com/campnmug/rent ← Paper, slide deck, data, code

```
Data Y;
   input Y @@;
   datalines;
   12.35  13.71  16.00  17.94  20.76  21.11  24.63
   27.56  32.88  35.16  39.26  44.28  47.27  51.55;
   run;
title 'The correct mean of y is 28.890 and the Std Dev is 12.9719';
proc means data=y mean std maxdec=4;
    run;
    title;
```

```
Data trdata;
   /* Problem is to explain the trend in variable Y.*/
   /* HO: An intervention that begins in T=8 has no effect on the trend line.*/
   /* H1: An intervention at T=8 changes the trend line.*/
   /* Alternative problem: */
   /* The actual equation is simply nonlinear in variables such as y = T TSQ.*/

   set Y;
   T=_N_;                    /* 1. create time variable. */
   TSQ = T*T;                /* 2. and time-squared value. */
   D=0; if T>=8 then D=1;    /* 3. Create binary variable for the intervention. */
   DT = D*T;                 /* 4. create interaction of D and T. */
   run;
```

```
ods graphics on / noborder width=5in;
%let xref = %str( xaxis values=(1 to 14 by 1);
                  refline 7.5 / axis=x label="<-- Policy change"
                  labelloc=inside labelpos=min ;);
```