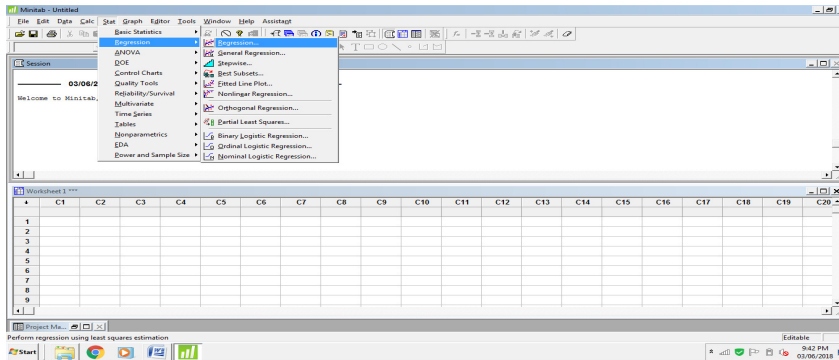


Regression

Used when both “X” and “Y” are in continuous form.

Purpose: To see if two or more variables have significant relationship between them. Here we can take more than two variables.

Path: Stat → Regression → Regression (mini-tab snap-shot given below)



Hypothesis: If H_0 (P value ≥ 0.05) No significant impact. Null hypothesis.
 If H_a (P value < 0.05) Significant impact. Alternate hypothesis.

R Square (RS): If Hypothesis is alternate (i.e. H_a), look for R square. RS in general must be $\geq 62\%$.

Scenario	P value	Rsquare	Inference	
1	0.06 H_0	No need to check	No significant impact	if scenario 3, we need to use regression equation
2	0.04 H_a	$< 62\%$	No significant impact	$Y = C + MX$
3	0.04	$\geq 62\%$	Significant impact	C is constant, M is mean

If more than two variable then :
 $Y = C + M_1X_1 + M_2X_2 + M_3X_3 + \dots + M_nX_n$