Generate a Correlation Table

Excel Step-by-Step How-to for Windows and Excel for Mac 2016 (v.16) and later

Instructions: Use this guide to generate a correlation table in an Excel spreadsheet. This will be achieved by using the Data Analysis toolkit.

Data requirement: At least two variables, quantitative data
Sample data: Job task data from White Manufacturing

Step	Windows Instructions + Screen Shot
1. Arrange the data so that each task is represented by a row and the details are listed in each column.	

	A	B	C	D	E	F
1	*Job*	*Completion Time (hours)*	*Pieces*	*Steps*	*Pieces X Steps*	*Rush Order (1=yes)*
2	1	152	127	7	889	1
3	2	329	600	5	3000	1
4	3	175	14	16	224	1
5	4	225	96	11	1056	1
6	5	250	21	9	189	1
7	6	230	84	13	1092	1
8	7	293	435	5	2175	0
9	8	126	76	8	608	1

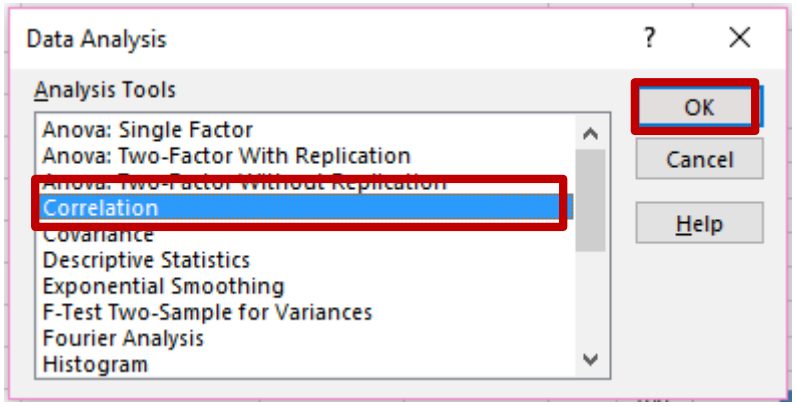
2. Make the last entry in the correlation table the completion time variable.

This particular correlation table makes the most sense if the completion time is the bottom entry of the table. To achieve this, move that data to the last column of the table.

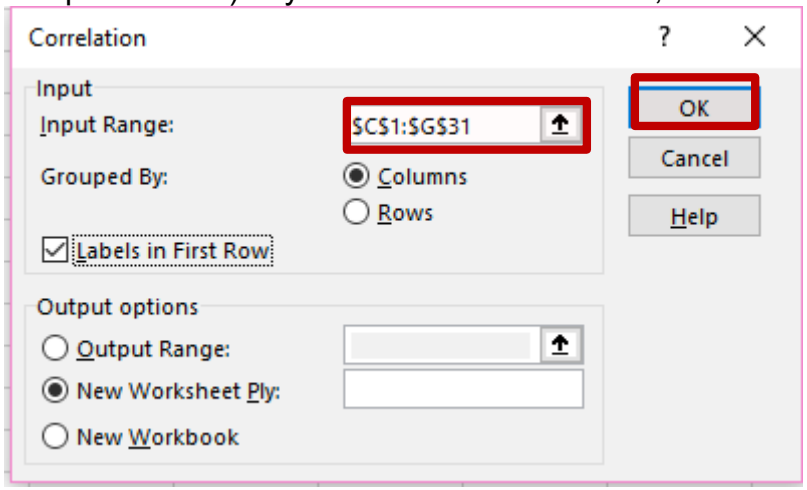
	A	C	D	E	F	G
1	*Job*	*Pieces*	*Steps*	*Pieces X Steps*	*Rush Order (1=yes)*	*Completion Time (hours)*
2	1	127	7	889	1	152
3	2	600	5	3000	1	329
4	3	14	16	224	1	175
5	4	96	11	1056	1	225
6	5	21	9	189	1	250
7	6	84	13	1092	1	230

3. Using the Data Analysis toolkit, create a correlation analysis.

Navigate to the Data tab and select the Data Analysis option. Select Correlation. Click OK.



Fill the Input Range with the data from all five categories (steps, pieces, rush job, pieces x steps, completion time). If you selected the label row, check the box for Labels in First Row. Click OK.



	A	B	C	D	E	F
1		*Pieces*	*Steps*	*Pieces X Steps*	*Rush Order*	*Completion Time*
2	Pieces	1				
3	Steps	-0.26549	1			
4	Pieces X Steps	0.859358	0.127515	1		
5	Rush Order	-0.21033	0.146608	-0.244490627	1	
6	Completion Time	0.736454	0.293971	0.962565009	-0.293781254	1