


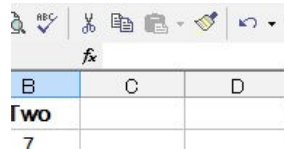
Step by step instruction of how to obtain correlation coefficients

① The simplest way

Type data in columns as follows:

	A	B
1	One	Two
2	2	7
3	3	2
4	1	3
5	4	0
6	6	3
7	5	4
8	4	8
9	7	2
10	8	8
11	7	1

Click function icon, 



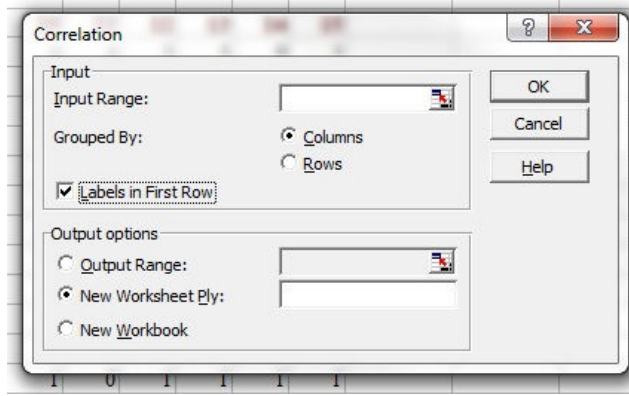
Select “Statistics” category and choose CORREL. Select the range of one data for Array1 and the other for Array2. (You can include the data titles, which gives the same result.)

You can type “=correl(a2:a11,b2:b11)” in a cell.

	A	B	C	D	E
1	One	Two			
2	2	7			
3	3	2			
4	1	3			
5	4	0			
6	6	3			
7	5	4			
8	4	8			
9	7	2			
10	8	8			
11	7	1			
12					
13	Correlation	-0.00995			

② Comparing the coefficients between multiple data sets

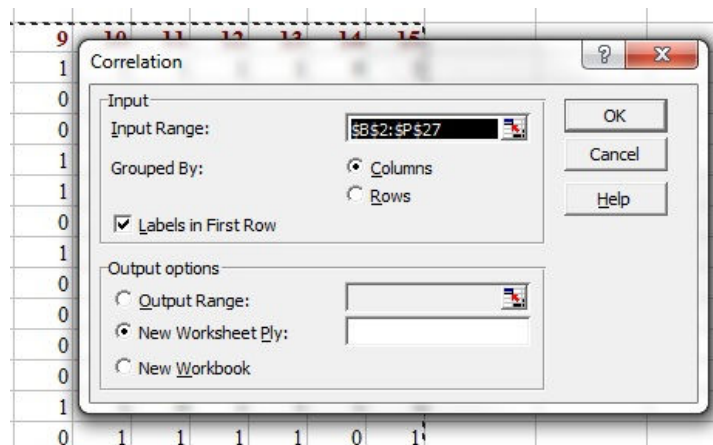
Go to Tools and select Data Analysis. (If you don't have the tool, go to Add-Ins (in Tools) to install the package.) Then, the following window will be popped up:



Check “Labels in First Row” to include the information of data. Then, put the cursor in “Input Range” in the above. Select the data range as follows:

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	0	1	1	0	1	1	0	1	1	1	1	1	1	0	1
2	0	0	1	0	0	0	1	0	0	1	0	1	0	1	0
3	0	0	0	0	1	0	0	0	0	0	1	0	0	1	0
4	1	1	1	1	1	1	1	0	1	1	1	0	1	1	1
5	1	1	1	1	1	1	1	1	1	0	1	1	0	1	1
6	0	0	1	0	0	0	0	1	0	0	1	0	1	0	0
7	0	1	0	0	1	0	1	0	1	1	0	0	1	1	0
8	1	1	1	1	0	1	0	1	0	1	1	0	1	0	1
9	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0
10	1	0	1	0	0	0	1	0	0	1	0	0	0	0	0
11	0	0	0	0	0	1	0	0	0	0	1	0	0	0	1
12	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1
13	1	1	1	1	1	1	0	1	0	1	1	1	1	0	1
14	0	1	1	0	0	1	1	1	1	0	0	1	0	1	0
15	1	1	1	1	1	1	0	0	1	0	1	1	1	0	1
16	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1
17	0	1	0	0	0	0	1	0	0	0	0	0	1	0	0
18	0	0	0	1	0	0	0	0	0	0	0	1	0	0	1
19	1	1	1	0	1	1	0	1	1	1	1	1	1	1	1
20	1	0	1	1	0	1	0	0	1	0	0	1	0	0	1
21	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
22	1	1	1	1	0	1	1	1	1	0	1	1	1	1	1
23	0	0	1	0	1	1	1	1	0	1	1	0	0	1	1
24	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1
25	1	1	1	1	0	1	1	1	0	0	1	0	1	1	1

If you see the range as follows, click OK.



The result will be appeared as indicated in the Output options above.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1														
2	0.438719	1													
3	0.54237	0.428412	1												
4	0.679487	0.277425	0.199098	1											
5	0.198718	0.277425	0.027462	0.198718	1										
6	0.522976	0.427669	0.490098	0.359546	0.196116	1									
7	0.116131	0.188312	0.082918	-0.04516	-0.04516	-0.0658	1								
8	0.282051	0.36775	0.487446	0.121795	0.121795	0.621034	0.045162	1							
9	0.36775	0.461039	0.262575	0.206456	0.36775	0.559259	0.136364	0.277425	1						
10	0.282051	0.206456	0.31581	-0.03846	0.442308	0.130744	0.206456	0.198718	0.116131	1					
11	0.359546	0.263181	0.315063	0.196116	0.359546	0.5	-0.23028	0.457604	0.065795	0.130744	1				
12	0.277425	0.188312	0.255665	0.438719	0.277425	0.263181	-0.13636	0.206456	0.461039	0.045162	-0.0658	1			
13	0.438719	0.675325	0.255665	0.277425	0.277425	0.263181	0.025974	0.36775	0.298701	0.36775	0.427669	0.025974	1		
14	0.116131	0.188312	0.082918	-0.04516	0.277425	0.098693	0.675325	0.206456	0.298701	0.206456	0.098693	0.025974	0.025974	1	
15	0.613825	0.342475	0.378726	0.613825	0.280224	0.748455	-0.16116	0.386976	0.329044	0.220176	0.578352	0.342475	0.342475	0.006715	1

This matrix shows each data correlation. (Obviously, correlation between the same data has to be 1.0.)