Excel is a powerful tool for tabular data with huge functionality Useful in conjunction with python, csv, mySQL, webpages, etc. E.g. Cleansing csv or webpage data & showing insights

Sample tabular data

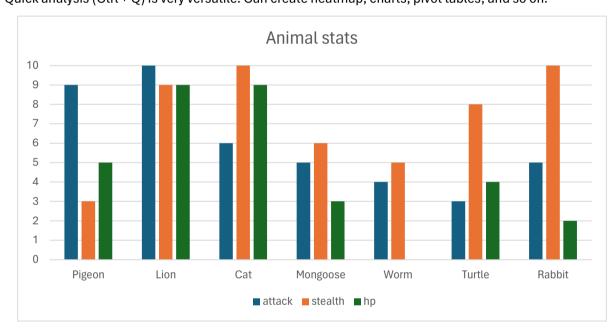
name	attack	stealth	hp	
Turtle	3		8	4
Worm	4		5	
Mongoose	5		6	3
Rabbit	5	1	0	2
Cat	6	1	0	9
Pigeon	9		3	5
Lion	10		9	9

Top Tip:

Highlight cells (Ctrl + Shift + Arrow) to see aggregate values (count, average, and sum) on bottom right

Action	Shortcut	Steps						
Highlight values	Ctrl + Shift + A	Ctrl + Shift + Arrow						
Make a table	Ctrl + T	Click	Insert	Table				
Autofit columns		Home	Cells	Format	AutoFit Column Width			
Quick analysis	Ctrl + Q	Ctrl + Q						
Insert row/column	Ctrl + +	Click or	Ctrl + Shift + =					
Delete row/column	Ctrl + -	Shift Space						
Formula	=							
Deselect	Esc							
Navigate	Ctrl + (arrows	Ctrl + (arrows, or home, end, pageup,)						
	Tab for next cell							

Quick analysis (Ctrl + Q) is very versatile. Can create heatmap, charts, pivot tables, and so on.



## transpose paste

attr	Pigeon	Lion	Cat	Mongoose	Worm	Turtle	Rabbit
attack	9	10	6	5	4	3	5
stealth	3	9	10	6	5	8	10
hp	5	9	9	3		4	2

Tip Create multiple sheets if needed

F2 to edit a cell. Most shortcuts use Ctrl / (Shift)

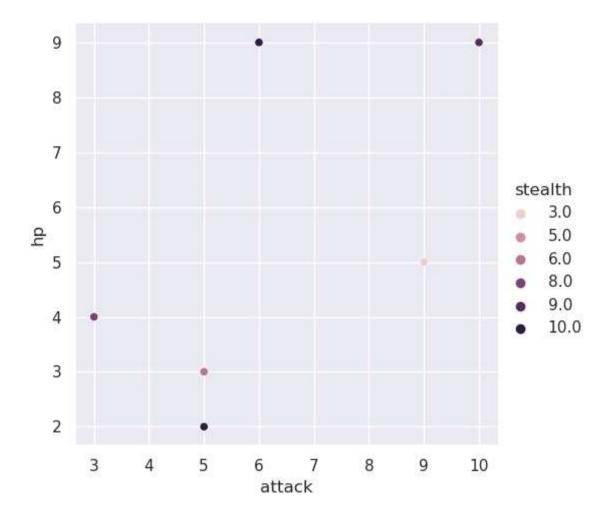
Alt + Enter for line break

Using python You can run any python code in here. =PY(). You can choose the output at the end to be a python or excel object.

It comes with matplotlib, pandas, sns, and an excel module imported. To use the xl() function to create a dataframe highlight the full table.

Generated /w python (seaborn, matplotlib, pandas)

Output as Excel object and right click to show over cells for resizing  $% \left( 1\right) =\left( 1\right) \left( 1\right) \left($ 



Definitions

Pivot table Simple table showing aggregate functions and useful insights

VLOOKUP Simple function for looking up values in a table

Macro /

Visual Basic A way to programatically carry out tasks in excel