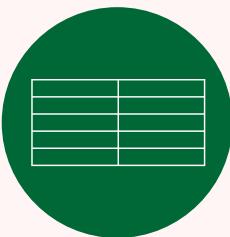


# How to use Python in Excel + AI



If your data is clean and AI-ready:



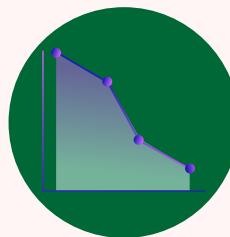
Load your data  
into a DataFrame



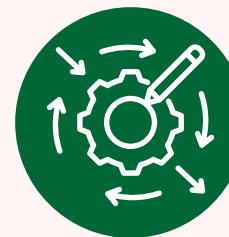
Ask an LLM (e.g.,  
ChatGPT) for  
Python code



Copy & paste the  
code into Excel



Generate outputs



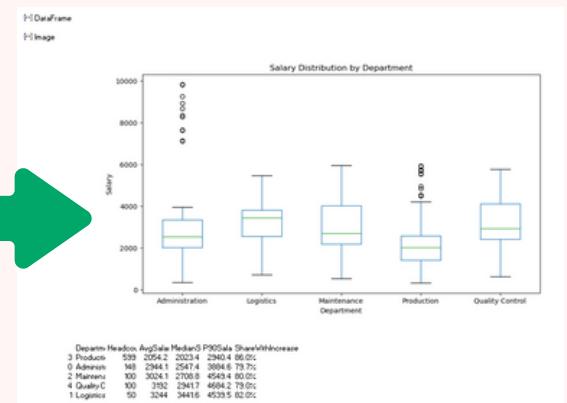
Iterate and  
improve

```
headcount = xl("Table2[#All]", headers=True)
PY(Use Ctrl+Enter to commit Python code)
```

Name	Department	Position	Salary	Increase	Decided
Alexandra	Administration	Administrative	2024		
Alison Chu	Administration	Accountant	2080.2		
Alison Jan	Administration	HR Officer	1744.7		
Amanda H	Administration	Administrative	2031.04		
Amanda W	Administration	Administrative	1782.13		
Amy Garza	Administration	Administrative	2462.14		
Andrew Ec	Administration	Administrative	2174.38		
Andrew Fr	Administration	Administrative	3056.34		
Andrew M	Administration	Administrative	3063.48		

Where should we begin?

I am using Python in Excel. I want code to do a headcount analysis with a boxplot graph. My data is in a dataframe called "headcount" and it looks like this: Name Department Position Salary Increase  
Decided for 2024 Alexandra White Administration Administration Officer 2024.003153 0.05 Alison Chan Administration Accountant 2080.197106 0.04 Alison James Administration HR Officer 1744.700666 0.03 Amanda Huerta Administration Administration Officer 2031.03809 0.02 Amanda Wood Administration Administration Officer 1782.133082 0





# How to use Python in Excel + AI



# This is NOT AI READY

Data is in messy report format:

- Totals are mixed with account-level data.
  - Notes and comments appear inside the table.
  - Wide format with too many merged or blank cells.
  - Hard to use in PivotTables / Power BI and with AI.

Report	Category	Subcategory	GL Account	Description	Jan/25	Feb/25	Mar/25
Balance sheet	Assets	Fixed Assets		Buildings	1,200,000.00		
Balance sheet	Assets	Fixed Assets	1100	Accumulated Depreciation - Buildings	-250,000.00	-5,000	-5,000
Balance sheet	Assets	Fixed Assets	1200	Machinery	450,000.00		
Balance sheet	Assets	Fixed Assets	1250	Accumulated Depreciation - Machinery	-90,000.00	-2,000	-2,000
				<b>Total Fixed Assets</b>	<b>1,310,000.00</b>	<b>-7,000.00</b>	<b>-7,000.00</b>
Balance sheet	Assets	Current	1300	Accounts Receivable	325,000.00	-5,000	10,000
Balance sheet	Assets	Current	1350	Inventory	180,000.00	15,000	-5,000
Balance sheet	Assets	Current	1400	Cash at Bank	75,000.00	-25,000	12,000
				<b>Total Current Assets</b>	<b>580,000.00</b>	<b>-15,000.00</b>	<b>17,000.00</b>
				<b>Total Assets</b>	<b>1,890,000.00</b>	<b>-22,000.00</b>	<b>10,000.00</b>



# How to use Python in Excel + AI



# This is AI READY

Data is structured and cleaned:

- Each row = one GL account.
  - No totals or comments mixed with details.
  - Still in wide format (columns for Jan, Feb, Mar...).
  - Good for Excel analysis but still needs transformation for advanced tools.

# How to use Python in Excel + AI



## This is AI READY+

This is AI READY+ (Even Better)

Data is in a fully normalized structure:

- Each row = one GL account, one month, one value.
- Includes dimensions: Report, Category, Subcategory, GL Account, Description, Month, Value.
- No repeated headers, no totals, no formatting issues.
- Perfect for automation, Power BI, and AI-driven analysis.

A	B	C	D	E	F	G
Report	Category	Subcategory	GL Account	Description	Month	Value
Balance sheet	Assets	Fixed Assets	1050 Buildings		Jan/25	1200000
Balance sheet	Assets	Fixed Assets	1050 Buildings		Feb/25	0
Balance sheet	Assets	Fixed Assets	1050 Buildings		Mar/25	0
Balance sheet	Assets	Fixed Assets	1050 Buildings		Apr/25	0
Balance sheet	Assets	Fixed Assets	1050 Buildings		May/25	0
Balance sheet	Assets	Fixed Assets	1050 Buildings		Jun/25	0
Balance sheet	Assets	Fixed Assets	1050 Buildings		Jul/25	0
Balance sheet	Assets	Fixed Assets	1050 Buildings		Aug/25	0
Balance sheet	Assets	Fixed Assets	1050 Buildings		Sept/25	0
Balance sheet	Assets	Fixed Assets	1050 Buildings		Oct/25	0
Balance sheet	Assets	Fixed Assets	1050 Buildings		Nov/25	0
Balance sheet	Assets	Fixed Assets	1050 Buildings		Dec/25	0
Balance sheet	Assets	Fixed Assets	1100 Accumulated Depreciation -Buildings		Jan/25	-250000
Balance sheet	Assets	Fixed Assets	1100 Accumulated Depreciation -Buildings		Feb/25	-5000
Balance sheet	Assets	Fixed Assets	1100 Accumulated Depreciation -Buildings		Mar/25	-5000
Balance sheet	Assets	Fixed Assets	1100 Accumulated Depreciation -Buildings		Apr/25	-5000
Balance sheet	Assets	Fixed Assets	1100 Accumulated Depreciation -Buildings		May/25	-5000
Balance sheet	Assets	Fixed Assets	1100 Accumulated Depreciation -Buildings		Jun/25	-5000
Balance sheet	Assets	Fixed Assets	1100 Accumulated Depreciation -Buildings		Jul/25	-5000
Balance sheet	Assets	Fixed Assets	1100 Accumulated Depreciation -Buildings		Aug/25	-5000
Balance sheet	Assets	Fixed Assets	1100 Accumulated Depreciation -Buildings		Sept/25	-5000
Balance sheet	Assets	Fixed Assets	1100 Accumulated Depreciation -Buildings		Oct/25	-5000
Balance sheet	Assets	Fixed Assets	1100 Accumulated Depreciation -Buildings		Nov/25	-5000
Balance sheet	Assets	Fixed Assets	1100 Accumulated Depreciation -Buildings		Dec/25	-5000
Balance sheet	Assets	Fixed Assets	1200 Machinery		Jan/25	450000
Balance sheet	Assets	Fixed Assets	1200 Machinery		Feb/25	0
Balance sheet	Assets	Fixed Assets	1200 Machinery		Mar/25	0
Balance sheet	Assets	Fixed Assets	1200 Machinery		Apr/25	0
Balance sheet	Assets	Fixed Assets	1200 Machinery		May/25	0
Balance sheet	Assets	Fixed Assets	1200 Machinery		Jun/25	0
Balance sheet	Assets	Fixed Assets	1200 Machinery		Jul/25	0
Balance sheet	Assets	Fixed Assets	1200 Machinery		Aug/25	0
Balance sheet	Assets	Fixed Assets	1200 Machinery		Sept/25	0
Balance sheet	Assets	Fixed Assets	1200 Machinery		Oct/25	0
Balance sheet	Assets	Fixed Assets	1200 Machinery		Nov/25	0
Balance sheet	Assets	Fixed Assets	1200 Machinery		Dec/25	0
Balance sheet	Assets	Fixed Assets	1250 Accumulated Depreciation -Machinery		Jan/25	-90000
Balance sheet	Assets	Fixed Assets	1250 Accumulated Depreciation -Machinery		Feb/25	-2000



NOT AI READY

AI READY

AI READY+

