



Alan German & Chris Taylor

Ottawa PC Users' Group

August 28, 2024

Welcome!

to our 196th Q&A
Session on Zoom

Topics covered
to date: 1,390
Participants: 7,037



Follow Up Poll: possible one-on-one remote assistance



At last week's Q&A we took a poll

- no promise this could or would happen
- gauge interest before putting in any effort



Possible one-on-one remote assistance

2 questions

1. If you had a basic computer problem, would you welcome a one-on-one zoom help session with an OPCUG member? (Single choice) *

☐ Yes

☐ No

2. Some possible issues would include: (Multiple choice)

☐ Windows operating system and/or Office Suite

☐ Issues with free or proprietary software

☐ Networking (browsing, downloading, uploading)

☐ Hardware issues (desktop, laptop, printer, router, hard drives)

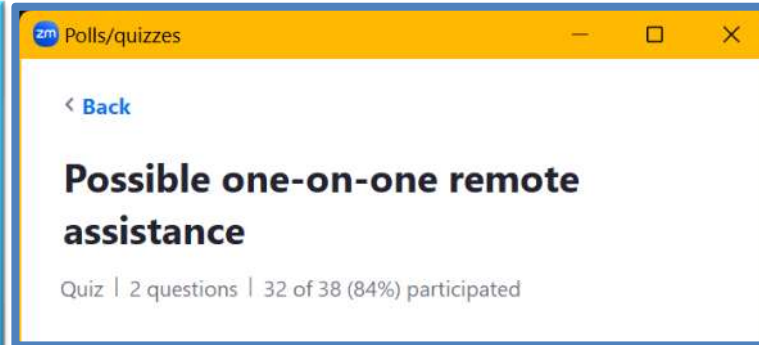
☐ Other

Submit

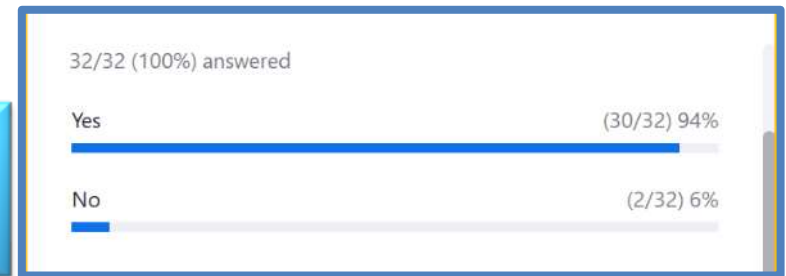
Follow Up Results

38 people in attendance when the poll taken

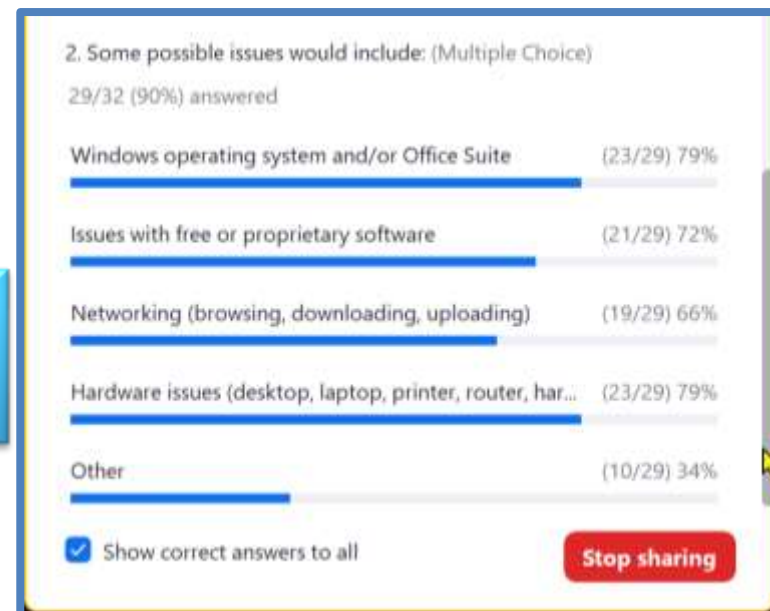
- 32 people responded to the poll
- 3 host/co-hosts can't respond



Strong interest in one-on-one support (94%)



Interest in very broad types of support



Follow Up Moving forward

- Strong enough support for one-on-one assistance to pursue further
- Seeking volunteers willing to provide remote assistance to others
- Offers of assistance could be very specific or general
 - I can help with problems in PowerPoint
 - I can help with problems using AI tools
 - I can help with setting up backup using EaseUS Todo Backup
 - I can help with email
 - I can help with Linux
 - I can help with a broad range of problems on case-by-case basis
- Aim: build a list of volunteers & areas of expertise
 - match up requests for assistance with potential helpers
- **Email SuggestionBox@opcug.ca if you want to volunteer**

Follow Up Moving forward (likely)

- **After** we compile a list of volunteers
- People looking for assistance write to SuggestionBox@opcug.ca
 - details of the specific problem they need assistance with
 - what they have done to try to resolve the issue on their own
- We try to find a volunteer who can help
 - volunteer given contact info of requestor
 - volunteer & requestor work out date/time/terms of engagement
 - assistance likely provided via **Windows Quick Assist** or **Zoom**
 - both allow remote viewing & remote control (keyboard/mouse)

Follow Up The fine print



- **One-on-one assistance only available to OPCUG members**
- Requestors should
 - be specific but as complete as possible in their request
 - consider if Q&A could provide adequate answers
 - potentially gain multiple responses and help others too
- Volunteer and requestor expected to provide feedback
- **The OPCUG cannot accept responsibility for a negative outcome**
 - volunteers strongly encouraged to do likewise



Deluge of scam E-mails

CMHA-YR EFT Remittance - Mozilla Thunderbird

File Edit View Go Message Tools Help

Get Messages Write Address Book Previous Next

From: Christopher Ralph <ralph@lodgeatkananaskis.info> Reply Forward Archive Junk Delete More

To: [REDACTED]

Subject: CMHA-YR EFT Remittance

9:10 a.m.

Remittance Advice.pdf **Link is NOT to a PDF file
(Hover the mouse over the link)**

Good afternoon,

Vendor (EFT) payment is remitted to your account today.

Thank you so much, your business is appreciated!

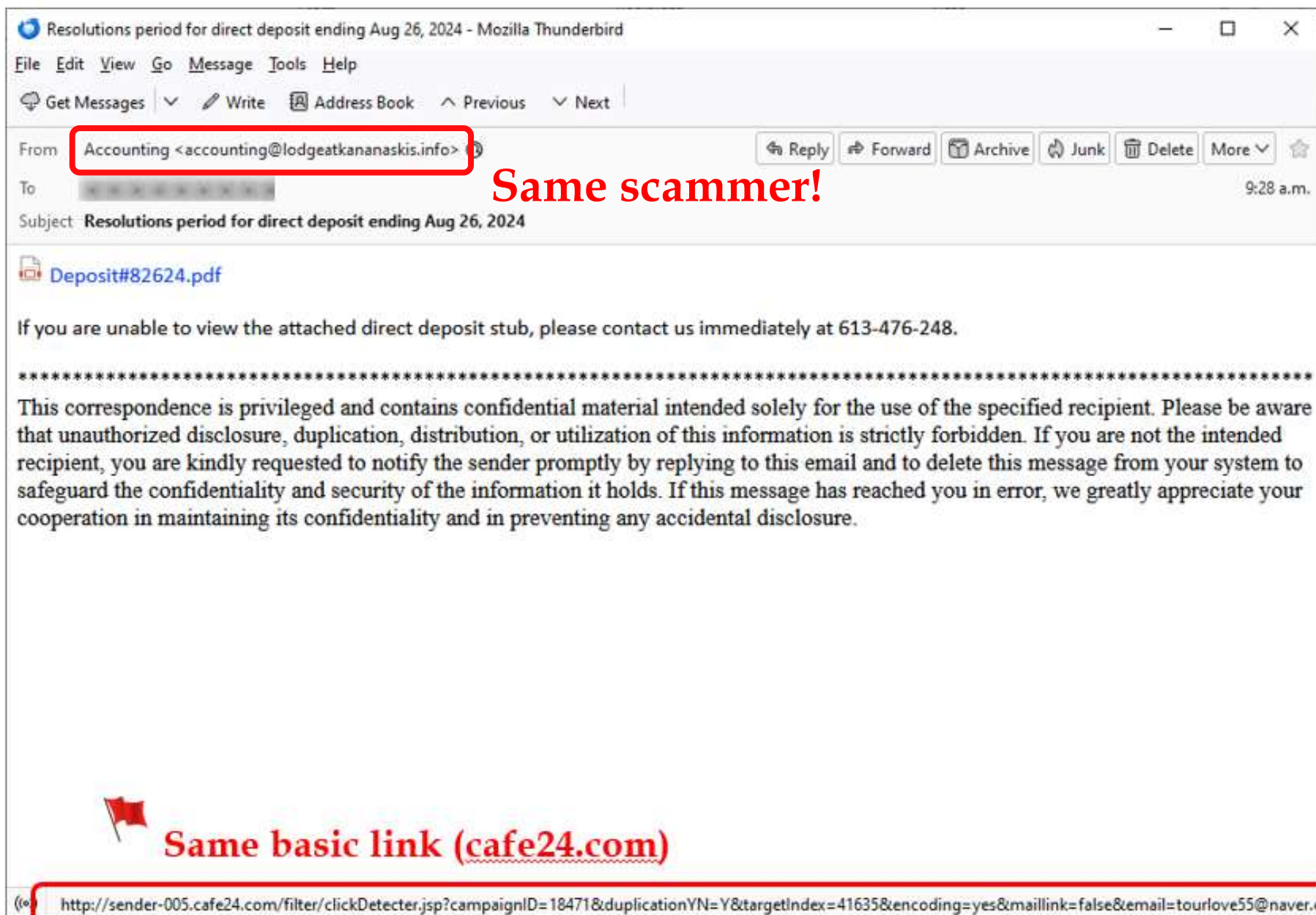
Christopher Ralph
Accounting

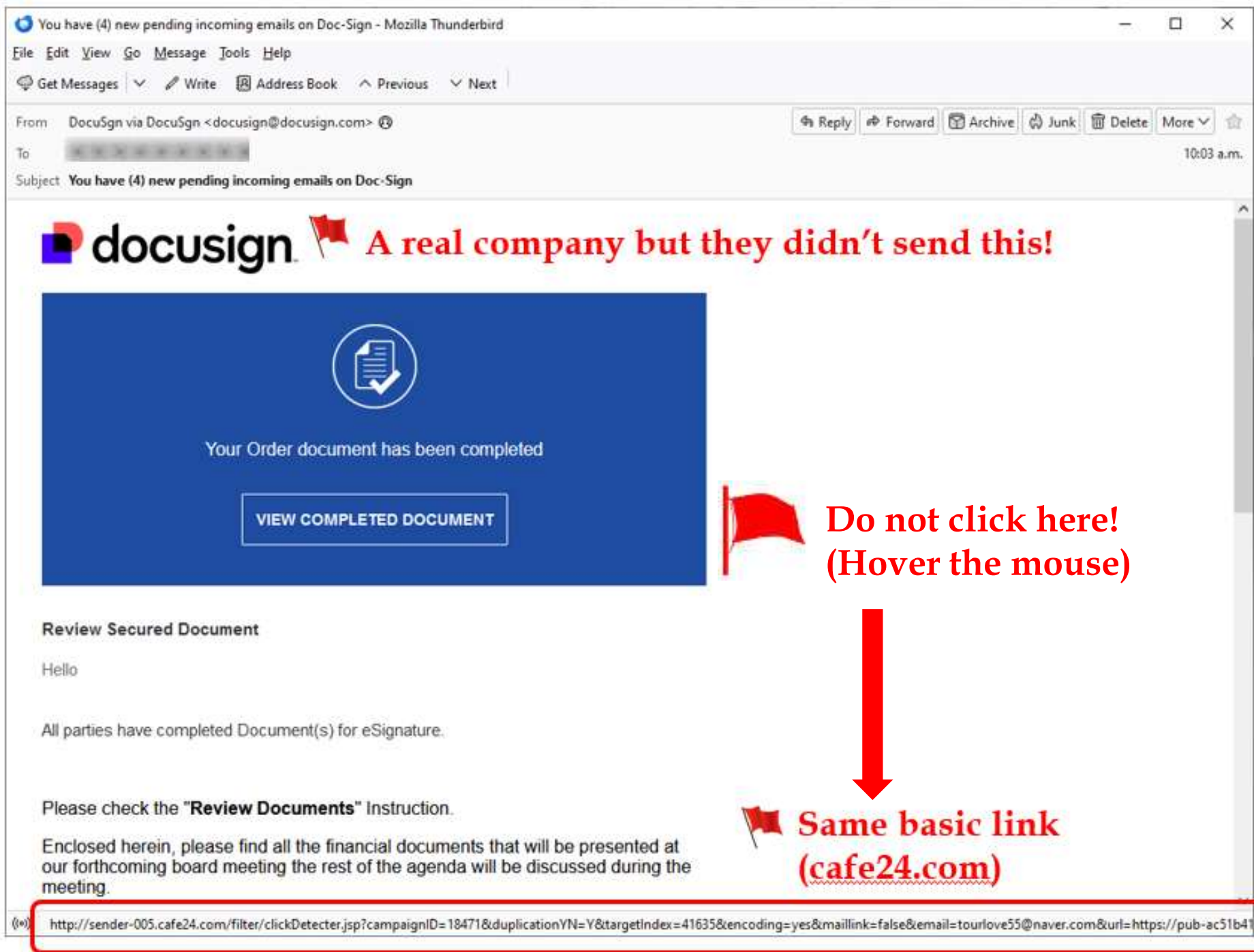
Toll Free: 1 (800) 784-4324
Phone: (403) 243-3310
Fax: (403) 243-2997

Chinook Pumps Ltd.
3824 7th Street SE
Calgary, Alberta, Canada
T2G 2Y8

**No dealings with
this company**

<http://sender-005.cafe24.com/filter/clickDetector.jsp?campaignID=18471&duplicationYN=Y&targetIndex=41635&encoding=yes&maillink=f>





EFT Payment Advice Notification - Mozilla Thunderbird

File Edit View Go Message Tools Help

Get Messages Write Address Book Previous Next

Reply Forward Archive Junk Delete More

From YorkRegion_EFT_Payment_NoReply <accounting@lodgeatkananaskis.info>

To [REDACTED]

Subject EFT Payment Advice Notification

11:23 a.m.

To protect your privacy, Thunderbird has blocked remote content in this message.

 **Adobe Sign**

Now, it's really annoying but, there is a fix...

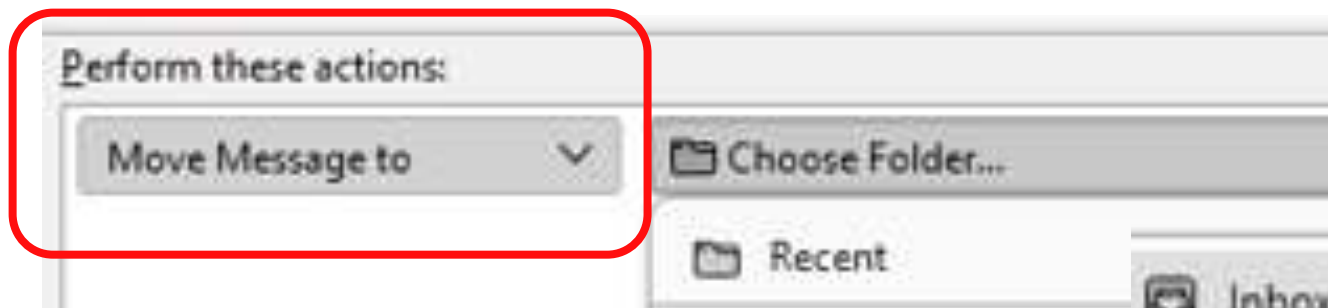
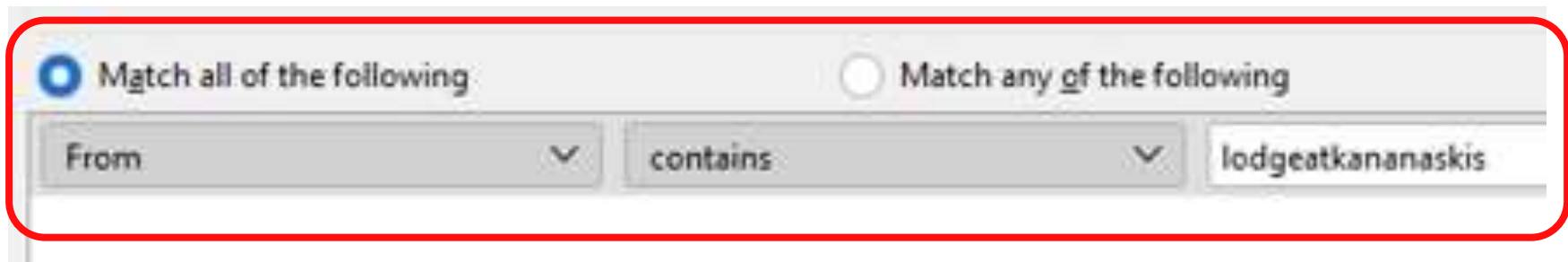


You're required to sign

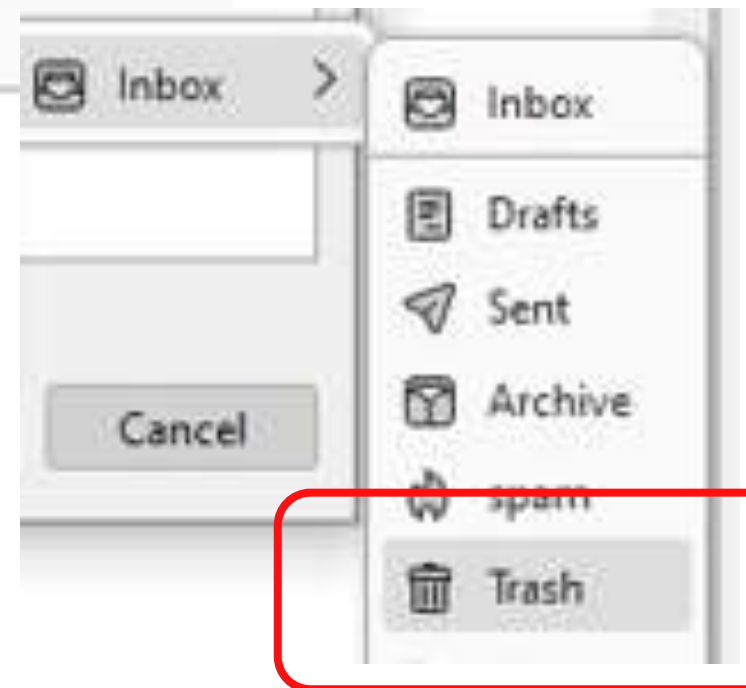
EFT Invoice #7801 Payment Approved - Agreement to Receive the Payment Document.

[EFT Invoice#7801_Payment_Approved.pdf](#)

<http://sender-005.cafe24.com/filter/clickDetector.jsp?campaignID=18471&duplicationYN=Y&targetIndex=41635&encoding=yes&maillink=false&emai>



**Thunderbird's
Message Filters!**

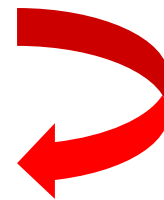
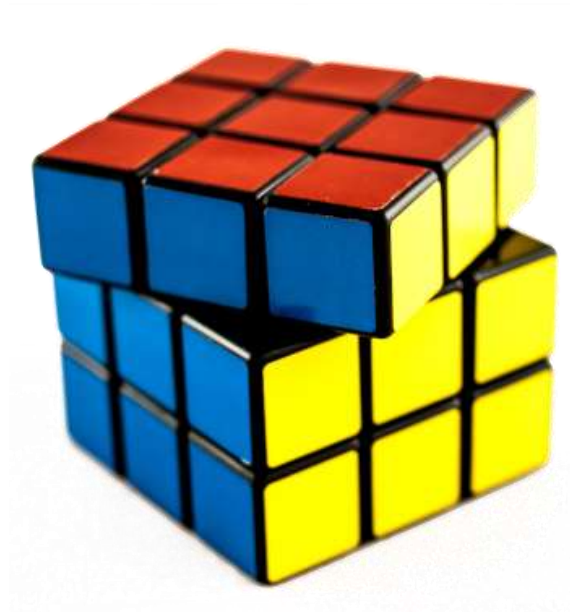


Message Storage

☐ Clean up ("Expunge") Inbox on Exit

☒ Empty Trash on Exit

Thunderbird's Server Settings

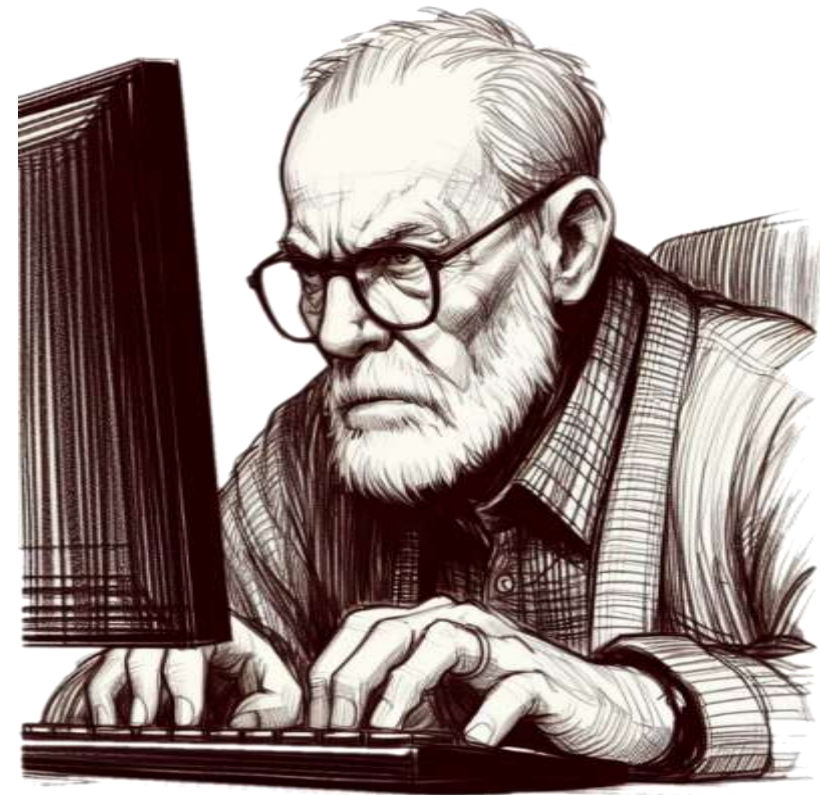


Problem solved !

Share

Perplexity.AI to the rescue (again)

- Problem with Thunderbird email client
- A few emails were not displaying correctly
 - body of email not showing or showing an unrelated graphic
 - *View > Message Source*
 - showed only random data
 - normally shows structured email headers followed by contents of email
- Unsure how to ask Google for a solution
 - average length of Google search query – 1.9 words & 8.5 characters



Share

Stating my problem

- Decided to provide a lot of information to Google
- *In the Thunderbird email client, I have some messages not displaying correctly. I suspect corruption in the message database. Is this possible or could it be corruption in an index? How can I repair the message database?*



Google search snare

Thunderbird is not *blowing up*

- whatever that means???

Don't think indexing is taking forever

Sounds rather generic

- but might have solution

Thunderbird has been running for years

- probably not installation issue
- but I do have a problem with *something*

Sounds relevant

- but is it specific to 115.9.0?

Don't know if I can search
for the problem messages



In the Thunderbird email client, I have some

All Images News Shopping Videos



Reddit - r/Thunderbird

20+ comments · 4 months ago ·

Thunderbird 115.9.0, **messages disappearing?** Database ...

The MSF files store metadata, and **can be corrupted**. The global search **index** option produces a **database** of sorts to make local searches faster.

7 answers · Top answer: Are these local folders, or is this on a mail server? If the latter, are yo...

A corrupted mail database blows up Thunderbird to ... - Reddit · Oct 31, 2021

Email database seems partially corrupted - Thunderbird - Reddit · Aug 5, 2024

Corrupted account inboxes since v102.n. : r/Thunderbird · Jul 27, 2022

Indexing messages forever! r/Thunderbird - Reddit · Nov 17, 2022

More results from www.reddit.com

Missing: displaying | Show results with: displaying

People also ask :

How do I fix a corrupted email in Thunderbird?

How do I fix Thunderbird email problems?

How to repair a Thunderbird database?

How do I clean up messages in Thunderbird?



Mozilla Support

<https://support.mozilla.org/en-US/questions>

Seriously need help with corrupt installation or something ...

Nov 17, 2021 — Been using **Thunderbird** a long time. On this machine, which has my long **email** history, the installation appears to be **corrupt** as many things ...



Mozilla Support

<https://support.mozilla.org/questions>

Emails getting corrupted (102.11.0 64 bit Ubuntu 22.04.2)

May 18, 2023 — **Thunderbird** uses an **index** file to display the list of **emails** and it calls on the **mbox** file to display contents of actual **emails**.



mozillaZine Forums

[https://forums.mozillazine.org/Thunderbird Support](https://forums.mozillazine.org/Thunderbird%20Support)

Thunderbird 115.9.0, messages disappearing? Database ...

Apr 3, 2024 — From your report that sounds **likely**. As a first recovery step, close **Thunderbird** and navigate to the profile folder

Thunderbird corrupt messages

Can't open old emails mozillaZine

Thunderbird Mail not loading up

HELP emails show up in "search" but can't find them nowhere! Apr 17, 2011

More results from forums.mozillazine.org

Missing: displaying correctly: suspect message repair

What is meant by
messages disappearing

Running on Windows

Sounds relevant

- but some are **new** messages

Share

The answer is there... somewhere

- No doubt answer lies somewhere in the Google results
- Might take considerable time to find *relevant* information
- Must be very careful to weed out bad information
 - don't want to make a bad situation
 - a few corrupted messages
 - a lot worse
 - maybe lose all emails by accepting advice such as
 - *delete the following files...*



Share

Queried Perplexity.AI

- One of the nicest things about Perplexity.AI
 - it welcomes:
 - long, free-form description of a problem and
 - what you are looking for
- *In the Thunderbird email client, I have some messages not displaying correctly. I suspect corruption in the message database. Is this possible or could it be corruption in an index? How can I repair the message database?*



Share

Structured answers

Nicely structured summary

- multiple possible solutions
- clear answers
- pulls relevant information
- easy to navigate

Seriously need help with corrupt installation or something bad · support.mozilla · 1

Thunderbird 115.9.0, messages disappearing?... · reddit · 2

Repair Corrupt Thunderbird Profiles and Extract Emails -... · bitrecover · 3

View 5 more

Answer

Corruption in Thunderbird's message database or indexes can indeed cause messages to display incorrectly. Here are some key points about this issue and how to address it:

Possible Causes

1. **Database Corruption:** Thunderbird stores messages in a database format, which can become corrupted. 1
2. **Index Corruption:** The index files (*.msf files) that Thunderbird uses to quickly access messages can also become corrupted. 2
3. **File System Issues:** Underlying file system problems can lead to corruption in Thunderbird's data files. 2

Repair Methods

Repairing Folders

1. Right-click on the problematic folder
2. Select "Properties"
3. Click on the "Repair Folder" button. 2 4

This process rebuilds the folder's index and can often resolve display issues.

Rebuilding Global Index

If multiple folders are affected, you may need to rebuild the global index:

1. Close Thunderbird
2. Navigate to your Thunderbird profile folder
3. Delete the global-messages-db.sqlite file
4. Restart Thunderbird. 1

Compacting Folders

Compacting folders can sometimes resolve corruption issues:

1. Right-click on the folder
2. Select "Compact". 1

Using Mailstore Home

For severe corruption cases:

1. Install Mailstore Home
2. Use it to archive your Thunderbird emails
3. This may recover emails that Thunderbird can't display correctly. 2

Prevention

To prevent future corruption:

1. **Regular Backups:** Backup your Thunderbird profile regularly. 1
2. **Use Maildir Format:** Consider switching to Maildir storage format, which stores each message as a separate file, reducing the risk of widespread corruption. 2

If these methods don't resolve the issue, you may need to consider more advanced recovery techniques or seek assistance from Thunderbird support forums.

Share

Multiple sources with links to sources

Share

Is Perplexity.AI better than Google search?

- I'm sure there is nothing Perplexity.AI comes up with that can't be found with a Google search
- Perplexity.AI
 - encourages lots of information in query
 - surfaces relevant information in a clear, concise summary
 - very focussed response – rarely includes chaff
 - *Ask follow-up* box to expand on query as needed
 - includes links to sources
 - *which should be read*
 - *Perplexity.AI is not immune to AI hallucinations*



Share

Run your own AI Chatbot

- Many AI bots are available using a web browser and the Internet
- Some are free (for now) while others require a subscription
- These bots usually know “everything”
- All I want is a bot that knows how to program in Python
- Wouldn't it be nice if I could find a small bot that speaks Python and would run on my PC?



which large language models are open source, specific to programming in Python, and will run on a PC?

Sources

10 Most Powerful Open Source Large Language Models In...

 spotintelligence · 1

Best Open Source LLMs of 2024 - Klu.ai

 klu · 2

The Ultimate Open-Source Large Language Model...

 kdnuggets · 3



View 5 more

Answer

Several open-source large language models are available that specialize in Python programming and can run on a personal computer. Here are some notable options:

Ollama

Ollama is a tool designed to run large language models locally, supporting several coding-focused models ²:

- CodeLlama (Python-specialized version available)
- WizardCoder (optimized for coding tasks)
- Easy setup and integration with Python
- Supports running on consumer-grade hardware



<https://ollama.com>

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Get up and running with large language models.

Run [Llama 3.1](#), [Phi 3](#), [Mistral](#), [Gemma 2](#), and other models. Customize and create your own.

[Download ↓](#)

Available for macOS, Linux, and
Windows (preview)

Download Ollama



macOS



Linux



Windows

Download for Windows (Preview)

Requires Windows 10 or later

While Ollama downloads, sign up to get
notified of new updates.

your email address

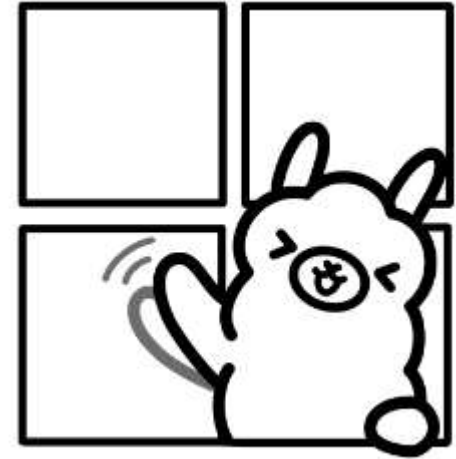
Get updates

Get started

To get started with the Ollama on Windows Preview:

- [Download](#) Ollama on Windows
- Double-click the installer, `ollamaSetup.exe`
- After installing, open your favorite terminal and run `ollama run llama2` to run a model

Ollama will prompt for updates as new releases become available. We'd love your feedback! If you encounter any issues please let us know by [opening an issue](#) or by joining the [Discord server](#).



<https://ollama.com/blog/windows-preview>



Setup - Ollama version 0.3.6



Ollama Windows Preview



Let's get you up and running with your own large language models.

Click Install to continue with the installation.

Install

Cancel

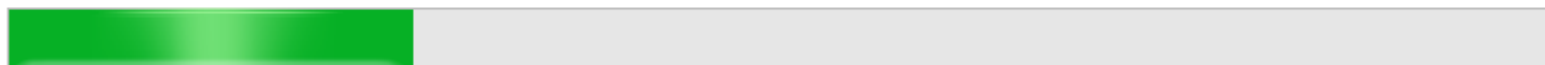
Installing

Please wait while Setup installs Ollama on your computer.



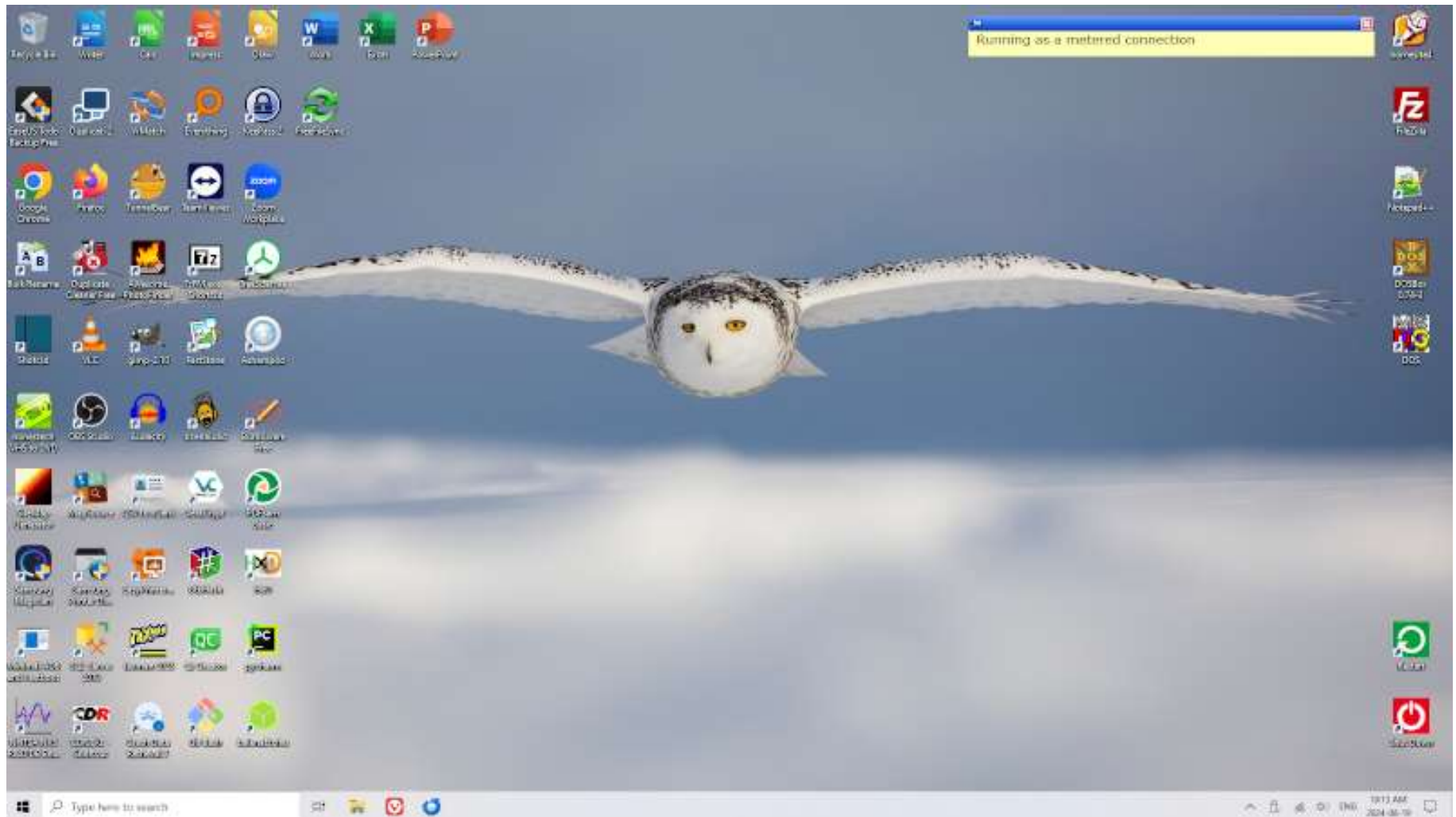
Extracting files...

C:\Users\toaster\AppData\Local\Programs\Ollama\cuda\cublas64_11.dll



Cancel

Nothing happens...

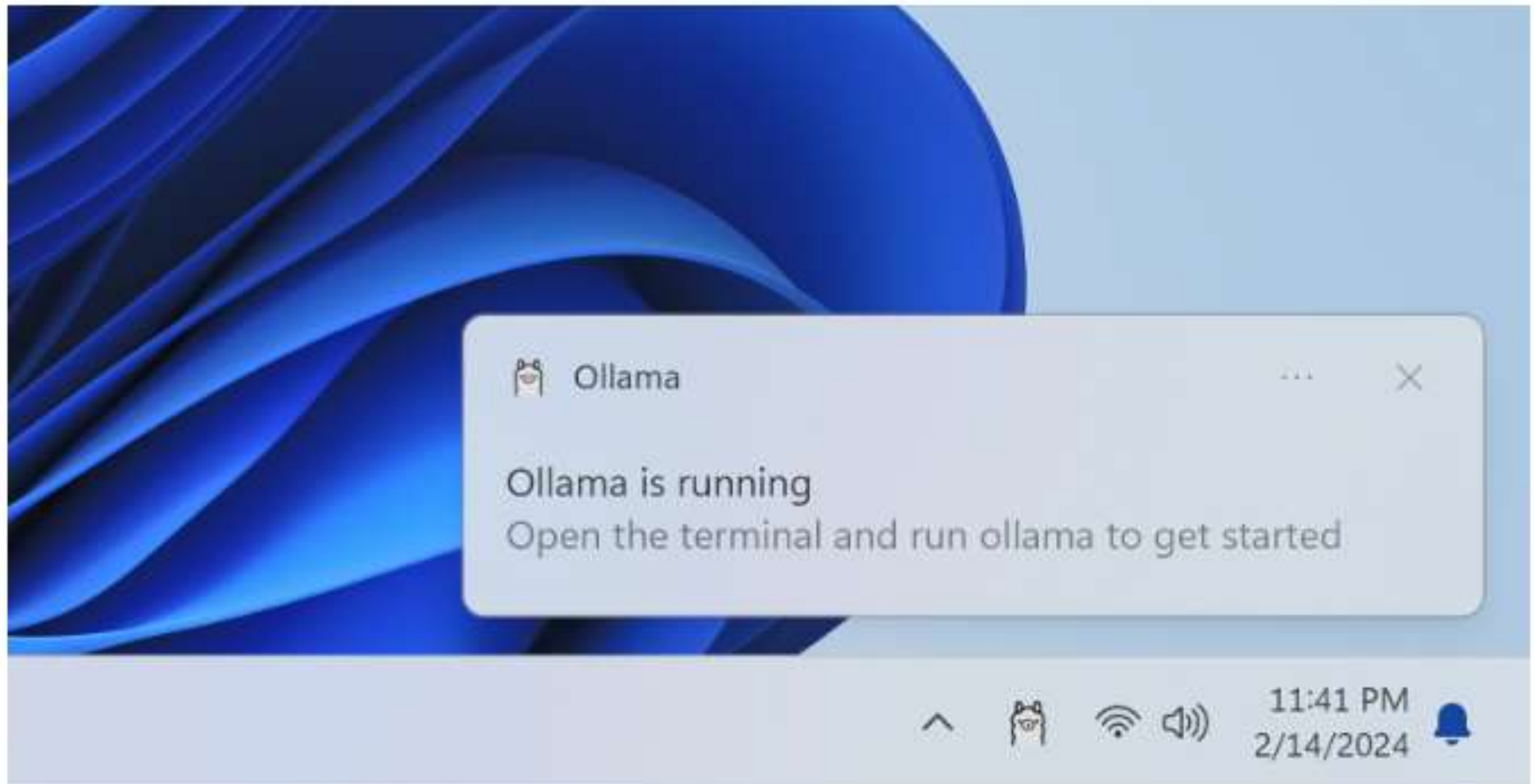


...or does it?



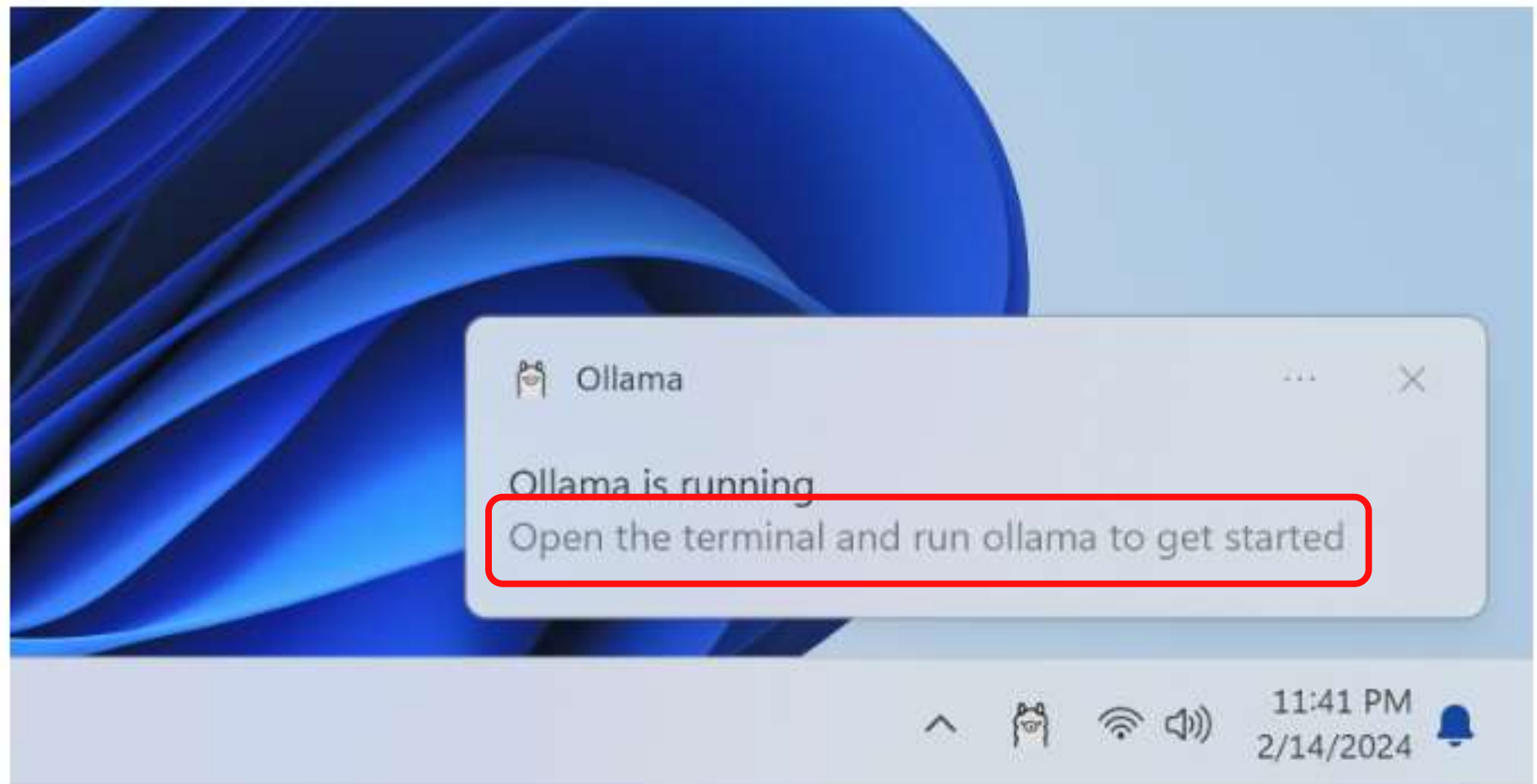
Always-on Ollama API

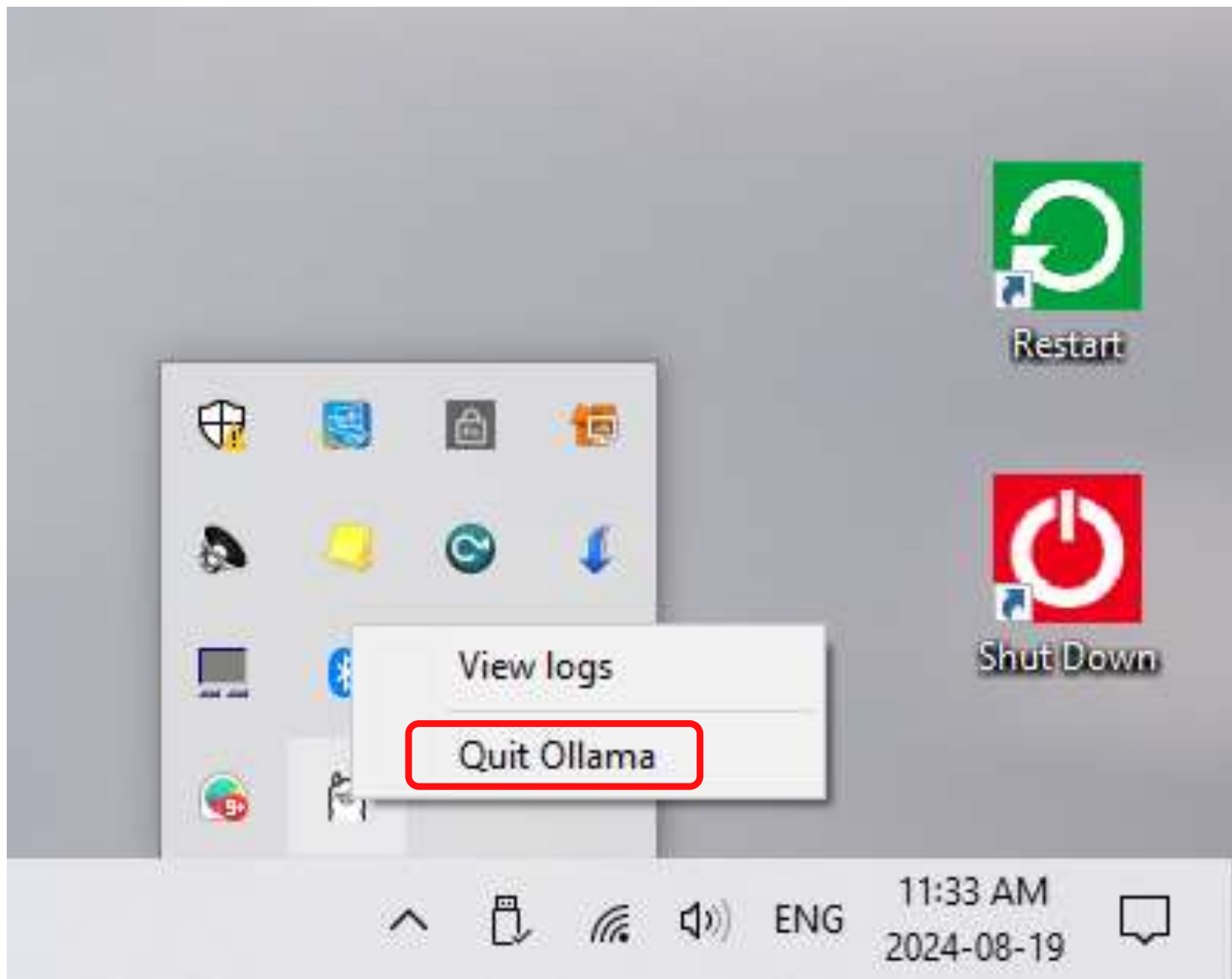
Ollama's API automatically runs in the background, serving on `http://localhost:11434`. Tools and applications can connect to it without any additional setup.



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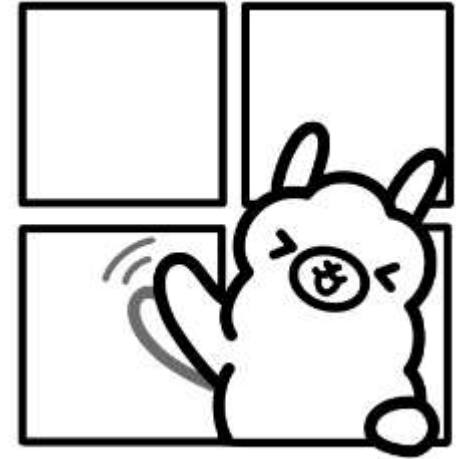


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Models

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llama3.1

Llama 3.1 is a new state-of-the-art model from Meta available in 8B, 70B and 405B parameter sizes.

[Tools](#)[8B](#)[70B](#)

↓ 1.5M Pulls ↗ 95 Tags ⌚ Updated 6 days ago

gemma2

Google Gemma 2 is a high-performing and efficient model by now available in three sizes: 2B, 9B, and 27B

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codellama

A large language model that can use text prompts to generate and discuss code.

[Code](#)[7B](#)[13B](#)[34B](#)[70B](#)

↓ 944.6K Pulls



199 Tags



Updated 4 weeks ago

phind-codellama

Code generation model based on Code Llama

codellama

A large language model that can use text prompts to generate and discuss code

Code

7B

13B

34B

70B

940.9K Pulls Updated 4 weeks ago

7 billion
13 billion
... parameter models

7b



199 Tags

ollama run codellama



Updated 10 months ago

8fdf8f752f6e · 3.8GB

model	arch llama · parameters 6.74B · quantization Q4_0	3.8GB
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license	LLAMA 2 COMMUNITY LICENSE AGREEMENT Llama 2 Version Release Date...	7.0kB
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codellama

A large language model that can use text prompts to generate and discuss code.

Code 7B 13B 34B 70B

↓ 940.9K Pulls ⌚ Updated 4 weeks ago

7b



🔖 199 Tags

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Updated 10 months ago

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↓ 940.9K Pulls ⌚ Updated 4 weeks ago

7b ▾

🔖 199 Tags

ollama run codellama 

latest	3.8GB	8fdf8f752f6e · 3.8GB
7b latest	3.8GB	parameters 6.74B · quantization Q4_0 3.8GB
13b	7.4GB	LLM LICENSE AGREEMENT Llama 2 Version Release Date... 7.0kB
34b	19GB	Acceptable Use Policy Meta is committed to promotin... 4.8kB
70b	39GB	{ .System }}<</SYS>> {{ .Prompt }} [/INST] 59B

[View more](#)

codellama

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7b



🏷 199 Tags

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🏷 199 Tags

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DOS - ollama run codellama



Microsoft Windows [Version 10.0.19045.4651]
(c) Microsoft Corporation. All rights reserved.

C:\Windows\System32>ollama run codellama

pulling manifest

pulling 3a43f93b78ec... 15%  585 MB/3.8 GB 3.6 MB/s 14m50s



C:\Windows\System32>ollama run codellama

pulling manifest

pulling 3a43f93b78ec... 100% [REDACTED] 3.8 GB

pulling 8c17c2ebb0ea... 100% [REDACTED] 7.0 KB

pulling 590d74a5569b... 100% [REDACTED] 4.8 KB

pulling 2e0493f67d0c... 100% [REDACTED] 59 B

pulling 7f6a57943a88... 100% [REDACTED] 120 B

pulling 316526ac7323... 100% [REDACTED] 529 B

verifying sha256 digest

writing manifest

removing any unused layers

success

>>> Send a message (/? for help)

Simple programming task:

Write a python program to compare file fox_01.txt to fox_02.txt and output any lines that are different



```
C:\Windows\System32>ollama run codellama
```

```
pulling manifest
```

```
pulling 3a43f93b78ec... 100% [REDACTED] 3.8 GB
```

```
pulling 8c17c2ebb0ea... 100% [REDACTED] 7.0 KB
```

```
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```
verifying sha256 digest
```

```
writing manifest
```

```
removing any unused layers
```

```
success
```

```
>>> ollama run codellama write a python program to compare file fox_01.txt  
... to fox_02.txt and output any lines that are different
```

```
C:\Windows\System32>ollama run codellama
```

```
pulling manifest
```

```
pulling 3a43f93b78ec... 100% [REDACTED] 3.8 GB
```

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```

```
verifying sha256 digest
```

```
writing manifest
```

```
removing any unused layers
```

```
success
```

```
>>> ollama run codellama write a python program to compare file fox_01.txt  
... to fox_02.txt and output any lines that are different
```

```
...
```

```
with open("fox_01.txt", "r") as f1:  
    with open("fox_02.txt", "r") as f2:
```

```
'''  
with open("fox_01.txt", "r") as f1:  
    with open("fox_02.txt", "r") as f2:  
        for line in f1:  
            if line != f2.readline():  
                print(line)  
'''
```

This program will read two files, "fox_01.txt" and "fox_02.txt". It will then compare each line of the two files and output any lines that are different. The `with open()` statement is used to open the files in read mode, and the `for` loop is used to iterate over the lines in both files. The `if` statement checks if the current line is not equal to the next line in the other file, and if it's not, it prints the line.

Note that this program assumes that the files have the same number of lines, and that the lines are in the same order in both files. If the files do not have the same number of lines or the lines are not in the same order, the program may produce unexpected results.

Real-world performance

```
C:\Windows\System32>_
```

Play the video: 20240828-DiffFile.mp4

You can also use the `difflib` module to compare the files:

```
import difflib
```

```
with open("fox_01.txt", "r") as f1:
    with open("fox_02.txt", "r") as f2:
        for line in f1:
            if line not in f2:
                print(line)
...
```

This program uses the `difflib` module to compare the files and only prints the lines that are different. The `difflib.SequenceMatcher()` class is used to compare the two files, and the `find\_longest\_match()` method is used to find the longest match between the two files. If no match is found, the line is printed to the console.

You can also use the `diff` command in the terminal to compare the files:

```
...
$ diff fox_01.txt fox_02.txt
...
```

This will output the lines that are different between the two files.

```
>>> Send a message (/? for help)
```

You can also use the `difflib` module to compare the files:

```
import difflib

with open("fox_01.txt", "r") as f1:
    with open("fox_02.txt", "r") as f2:
        for line in f1:
            if line not in f2:
                print(line)
```

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>>> Send a message (/? for help)

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with open("fox_01.txt", "r") as f1:
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        for line in f1:
            if line not in f2:
                print(line)
```

This program uses the `difflib` module to compare the files and only prints the lines that are different. The `difflib.SequenceMatcher()` class is used to compare the two files, and the `find\_longest\_match()` method is used to find the longest match between the two files. If no match is found, the line is printed to the console.

You can also use the `diff` command in the terminal to compare the files:

```
$ diff fox_01.txt fox_02.txt
```

This will output the lines that are different between the two files.

>>> Send a message (/? for help)

```
>>> s = SequenceMatcher(None, " abcd", "abcd abcd")
>>> s.find_longest_match(0, 5, 0, 9)
Match(a=0, b=4, size=5)
```

class `difflib.SequenceMatcher`

This is a flexible class for comparing pairs of sequences :

find_longest_match(*a*lo=0, *a*hi=None, *b*lo=0, *b*hi=None)

Find longest matching block in `a[alo:ahi]` and `b[blo:bhi]`.

`difflib` — Helpers for computing deltas

<https://docs.python.org/3/library/difflib.html>

You can also use the `difflib` module to compare the files:

```
import difflib

with open("fox_01.txt", "r") as f1:
    with open("fox_02.txt", "r") as f2:
        for line in f1:
            if line not in f2:
                print(line)
```

This program uses the `difflib` module to compare the files and only prints the lines that are different. The `difflib.SequenceMatcher()` class is used to compare the two files, and the `find\_longest\_match()` method is used to find the longest match between the two files. If no match is found, the line is printed to the console.

You can also use the `diff` command in the terminal to compare the files:

```
$ diff fox_01.txt fox_02.txt
```

This will output the lines that are different between the two files.

>>> Send a message (/? for help)

D:\DiffFox.py - Notepad++

File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?



DiffFox.py

```
1 with open("fox_01.txt", "r") as f1:
2     with open("fox_02.txt", "r") as f2:
3         for line in f1:
4             if line not in f2:
5                 print(line)
6
```

D:\fox_01.txt - Notepad++

File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ? + ▾



fox_01.txt

```
1 The quick brown fox
2 jumped over the lazy dog
3
```

length : 47 lines : 3 Ln : 1 Col : 1 Pos :

D:\fox2.txt - Notepad++

File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ? + ▾

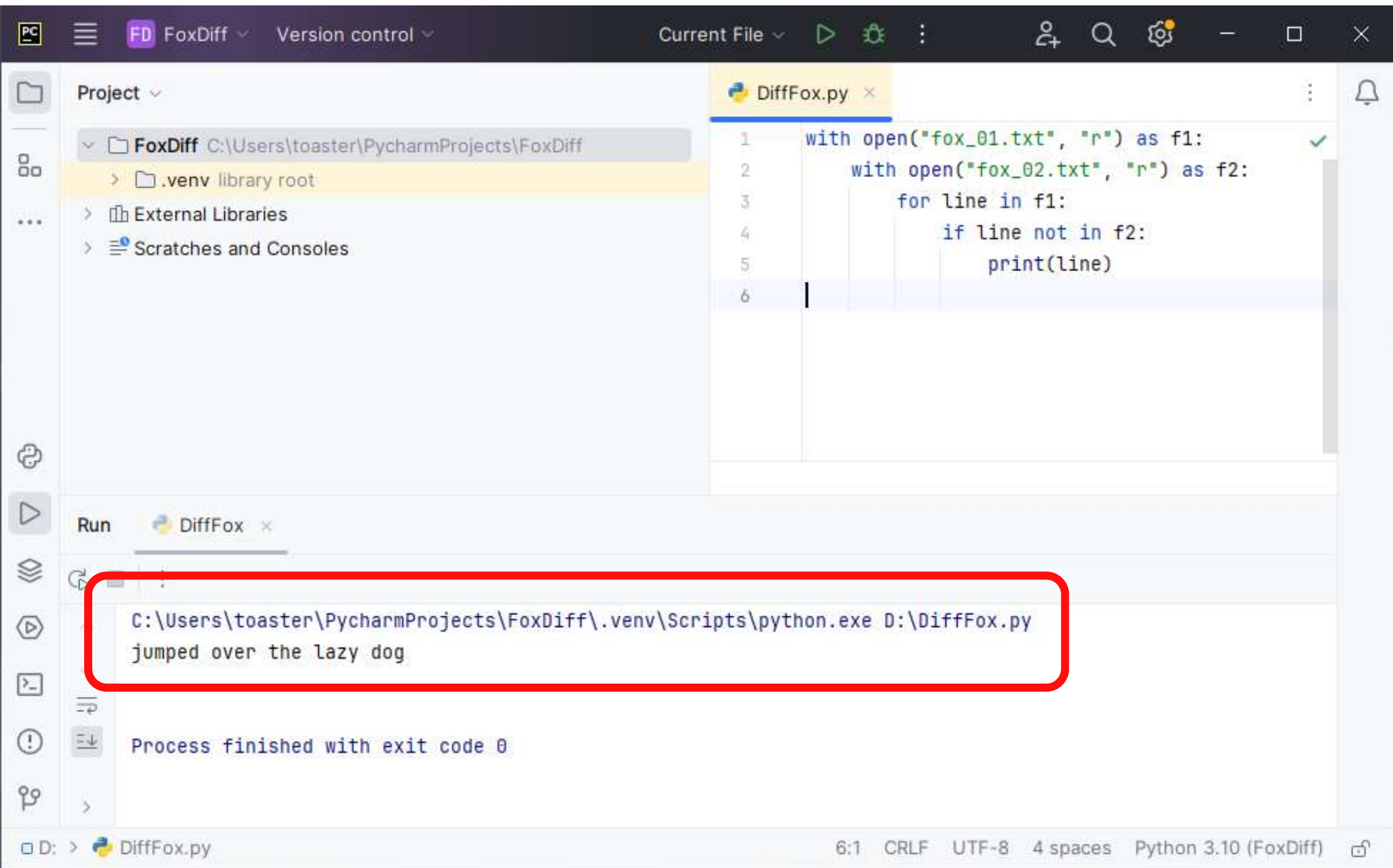


fox_01.txt fox2.txt

```
1 The quick brown fox
2 jumped over the extremely lazy dog
3
4
5
6
7
8
9
10
11
12
13
14
```

length : 99 lines : 24 Ln : 1 Col : 1 Pos : 1

Windows (CR LF) UTF-8 INS



 write a python program to compare fox_01.txt to fox_02.txt and output any lines that are different 



Here's a Python script that compares two text files (`fox\_01.txt` and `fox\_02.txt`) line by line and outputs any lines that differ:

python

 Copy code

```
def compare_files(file1, file2):  
    with open(file1, 'r') as f1, open(file2, 'r') as f2:  
        lines1 = f1.readlines()  
        lines2 = f2.readlines()  
  
    # Find the maximum number of lines in the files  
    max_lines = max(len(lines1), len(lines2))
```

How the Script Works:

- **Reading Files:** The script opens both files and reads their contents into lists (`lines1`` and `lines2``).
- **Finding Differences:** It then compares each line from both files. If the lines differ, it prints the line number along with the contents of the differing lines from both files.
- **Handling Different Lengths:** The script also accounts for cases where the files have different lengths by checking if either file runs out of lines.

To use this script, save it to a Python file, replace `'fox_01.txt'` and `'fox_02.txt'` with the appropriate file paths if they are located elsewhere, and run the script.

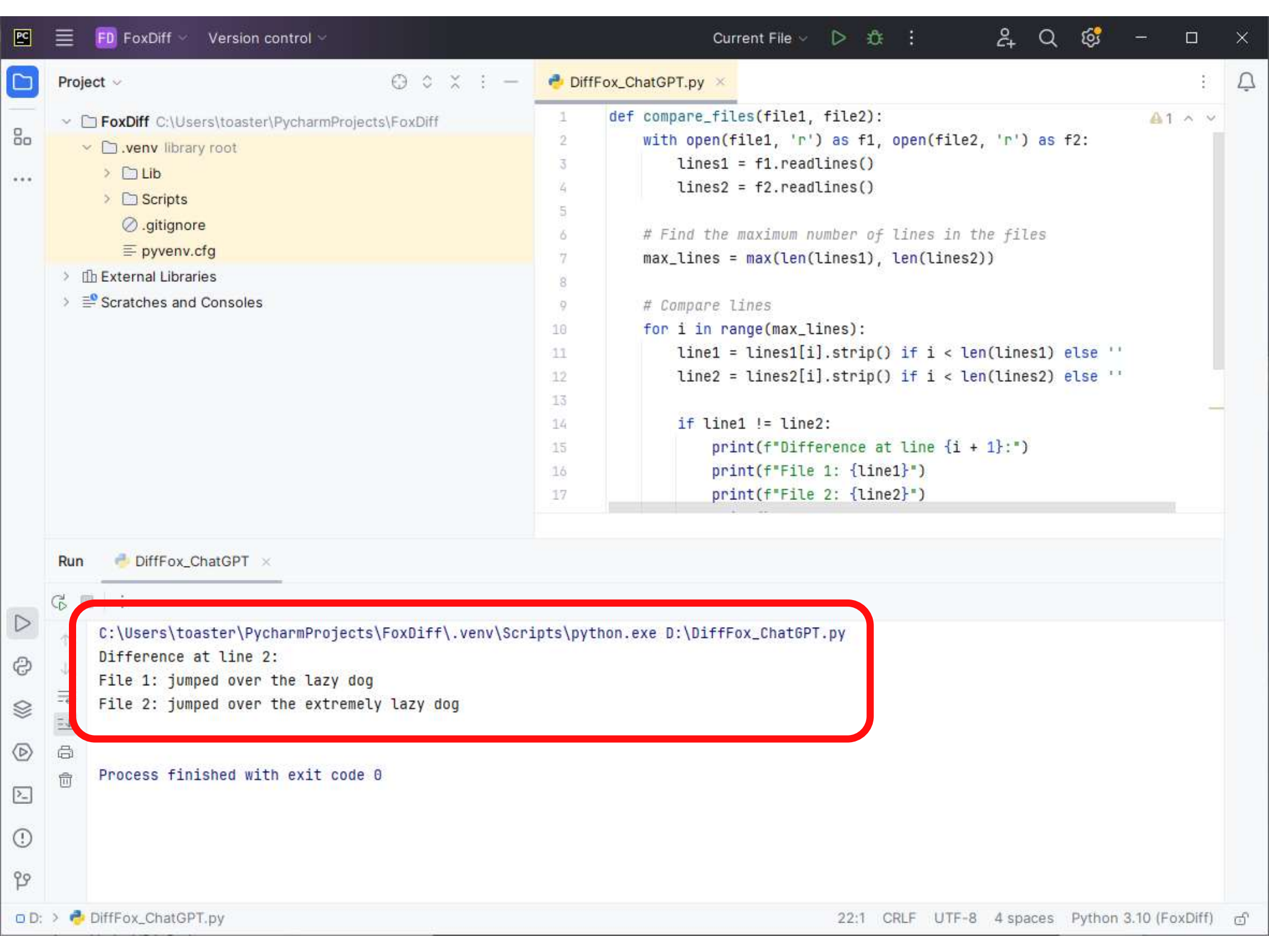
```
def compare_files(file1, file2):
    with open(file1, 'r') as f1, open(file2, 'r') as f2:
        lines1 = f1.readlines()
        lines2 = f2.readlines()

    # Find the maximum number of lines in the files
    max_lines = max(len(lines1), len(lines2))

    # Compare lines
    for i in range(max_lines):
        line1 = lines1[i].strip() if i < len(lines1) else ''
        line2 = lines2[i].strip() if i < len(lines2) else ''

        if line1 != line2:
            print(f"Difference at line {i + 1}:")
            print(f"File 1: {line1}")
            print(f"File 2: {line2}")
            print()

# Replace 'fox_01.txt' and 'fox_02.txt' with your file paths if needed
compare_files('fox_01.txt', 'fox_02.txt')
```



My Conclusions

- Note to SU (Spousal Unit) - I need to buy a bigger, faster computer!
- Ollama is really easy to install
- Lots of how-to tutorials and videos are available
- Running a LLM locally is slow and is likely not yet ready for prime time
- Local LLM's can (more or less) hallucinate
(unused library, Linux command for Windows system)
- The Python-specific version of Llama 3 produces useful code (snippets)
- Is it worth pursuing local LLM's further...?



**Any other:
Questions
Comments
Shares?**

September Meeting

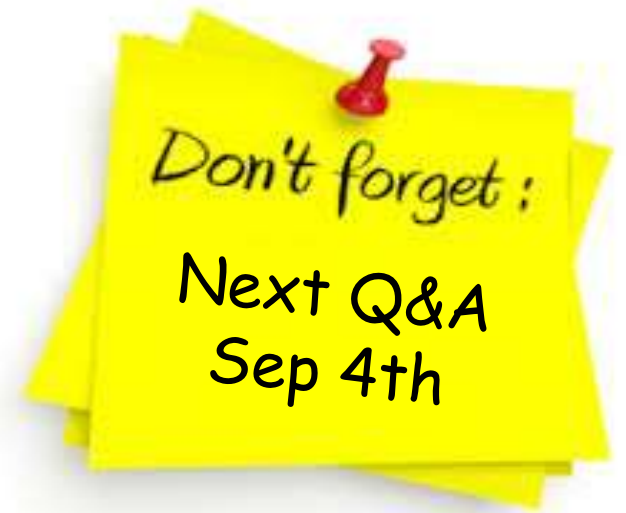


Building a Website – No Coding Required!

Alan German
OPCUG

September 11, 2024
7:30 pm





**Send your questions,
answers, and topics *
you wish to share to:**

SuggestionBox@opcug.ca

** Questions, comments, and shares can be anonymous if requested*