

Perara Seed

Instruction Manual V1.0

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By SSJR-Quartz

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***Note:** If all you want to do is look at the complete Japanese-English comparison, please head to [output_final](#) on Page 5.

About

Until now, there has been no complete dump, made accessible to the public, comparing the official English and Japanese text from Nintendo's *The Legend of Zelda: Breath of the Wild*.

Additionally, so far there has been no concentrated effort to create a full English fan-translation that is more accurate to the original Japanese text. As has been pointed out within the fandom, there are a number of glaringly different alterations in the official English localization. One of the most notable of these changes is the switch from [first person Quest logs](#) written from Link's POV, including some of Link's very own thoughts, in Japanese, to third person Quest logs utterly scrubbed of Link's personality in English.

Using msyt files, the mini project **Perara Seed** gives users **a full dump of both Japanese and English text from the game, compared side-by-side, in a directory of csv files**. The csv files were generated using the original English and Japanese msyt files from the msyt-tools toolset. The **script** for processing the msyt files and producing the dump is also included as reference.

It is my hope that this small project may be one of many first steps towards an accurate English fan-translation of the game, and that it may be a useful tool or reference towards anyone else wanting to translate the game text into another language – whether it is a translation into a language not officially offered by Nintendo, such as Arabic, or simply a more accurate fan-translation.

“Perara Seed” comes from ペララの実 (Perara no Mi), the original Japanese name for the [Jabber Nut](#) from *The Legend of Zelda: The Minish Cap*. After eating the Jabber Nut, Link gains the ability to communicate with the Minish.

“Perara” comes from ペラペラ ([pera pera](#)), an onomatopoeic word for speaking (a foreign language) fluently. “Seed” comes from one possible translation of [実 \(Mi\)](#); another possible translation is “fruit” or “nut.” I chose “seed” as I hope that this project may become part of the groundwork from which better fan-translations may continue to sprout and grow.

Disclaimer

Perara Seed was developed and tested solely with Python 3.9.2 on Windows 10. It is untested with other operating systems and older versions of Python. If you are not using Windows 10 or Python 3.9+, please proceed at your own discretion.

Acknowledgements

I would like to thank @MLagaffe of [Eternal Dream Arabization](#) and the admins at the [Zelda Mods Discord](#) for their support, especially in granting me a wealth of insight into Nintendo localizations and into overall project setup, respectively.

Many thanks to [polarbunny](#) for their creation of [msyt-tools](#). This incredibly handy toolset is invaluable for putting text edits of any kind into the game.

Last but not least, many thanks to Nintendo for *The Legend of Zelda: Breath of the Wild*. Even years after its release, this game continues to inspire me and further reinvigorate me to simply create.

Contact

If you have any questions about this toolset or about the actual Japanese-English comparison, please feel free to ask me in the [#research-and-others](#) channel in the [BotW Modding Hub](#). I am most active these days in this Discord. My username is SSJR.Quartz.

Requirements:

1. **(a) Google Sheets OR (b) a code editor** with (i) user-friendly CSV file-viewing and (ii) Japanese text display capabilities.
 - Required for viewing the csv files in a user-friendly Excel sheet format, and for correctly displaying the Japanese text.
2. Python 3.9+ 64-bit
 - Required for the perara-seed.py script to run.
 - This will work with msyt-tools as well, as msyt-tools requires Python 3.6+ 64-bit.
3. sarc
 - Required for msyt-tools.
4. rstb
 - Required for msyt-tools.
5. msyt-tools
 - Recommended for acquiring the Japanese and English text input.
6. unicodcsv
 - Required for perara-seed.py to run correctly.
7. tqdm
 - Required for perara-seed.py to run correctly.

Download Contents

output_final

This directory contains 8 folders of csv files. They are all organized in the exact same way as the .msyt files are organized in the .sarc Message files in the game.

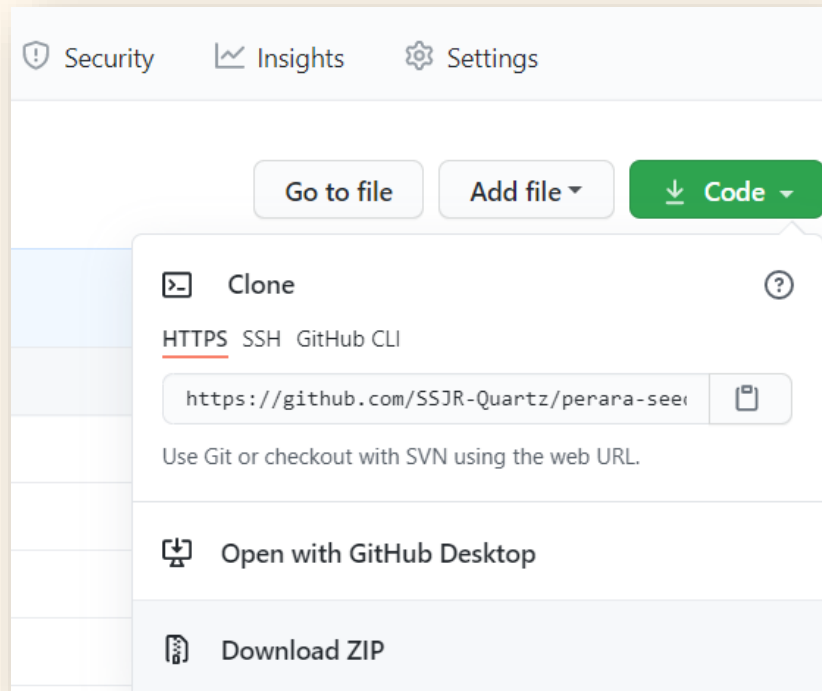
The information in each csv file is divided into 4 columns:

1. **#** indicates the numerical order that the text appears in the original msyt file.
2. **Title** indicates the title of the text entry in the original msyt file.
3. **JPja** indicates the original Japanese text in the Japanese msyt file.
4. **USen** indicates the text for the official English localization in the English msyt file.

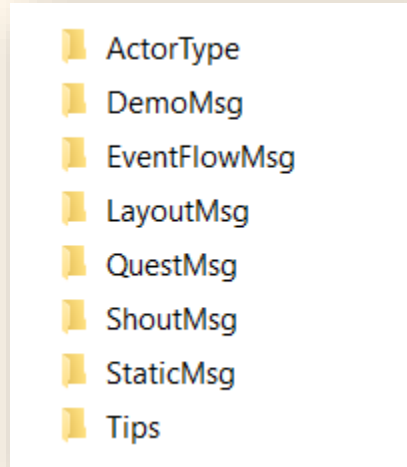
Note that some of the csv files will only contain the column headers, and no other text. This is because that msyt file simply has no text entries in it. The csv file is included regardless, for documenting purposes.

Instructions for viewing:

1. Download the perara-seed repository into a ZIP file, by navigating to the green “Code” button on the perara-seed repository homepage, and clicking “Download ZIP” at the bottom of the dropdown menu.



2. Extract the zip file. Open the output_final directory. You should now see 8 subfolders, all of which contain the csv files comparing Japanese and English text:

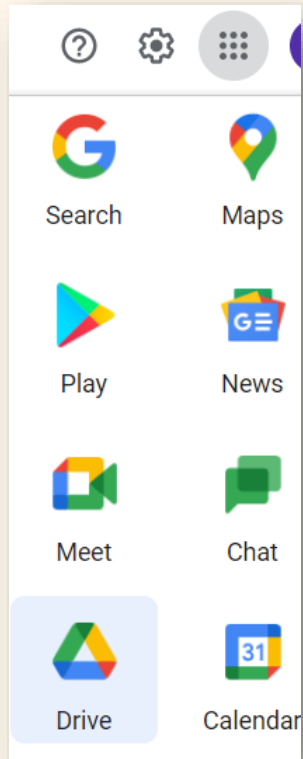


To view with Google Sheets, continue to Step 3.

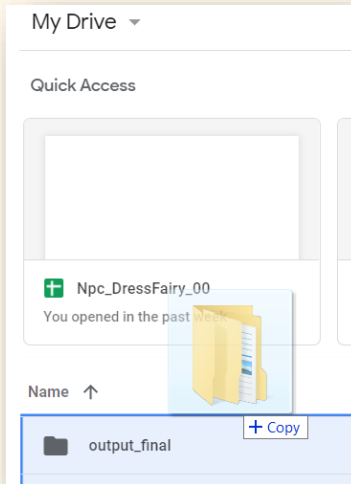
To view with a code editor (in this guide, I will cover Visual Studio Code), continue to Step 4.

3. View with Google Sheets

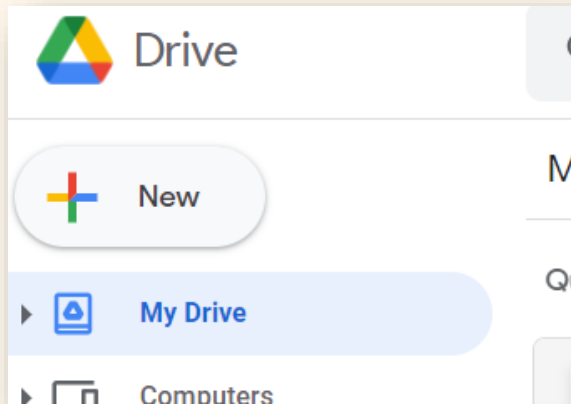
- a. In a Gmail account, navigate to your Google Drive, using the dropdown menu in the top right corner.

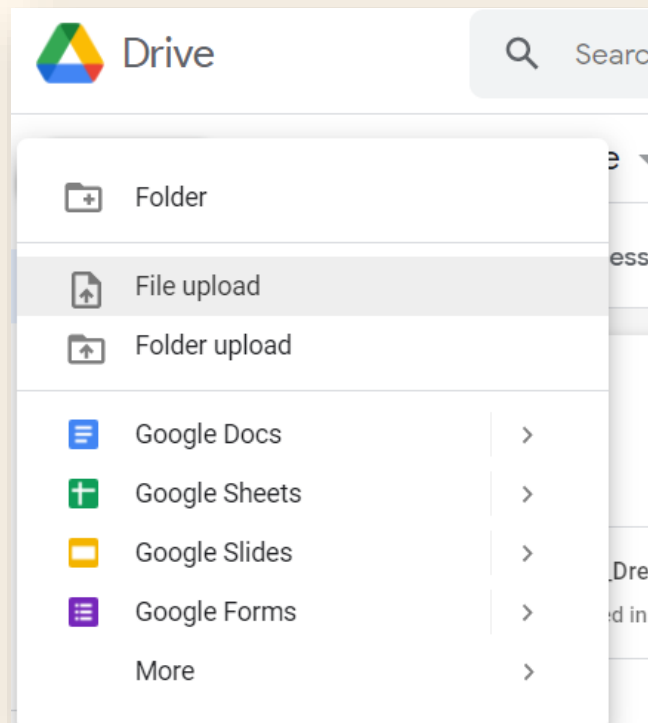


- b. Upload the csv file(s) you want to view to your Google Drive. You can do this in one of two ways:
 - i. Drag and drop the file into your Google Drive.

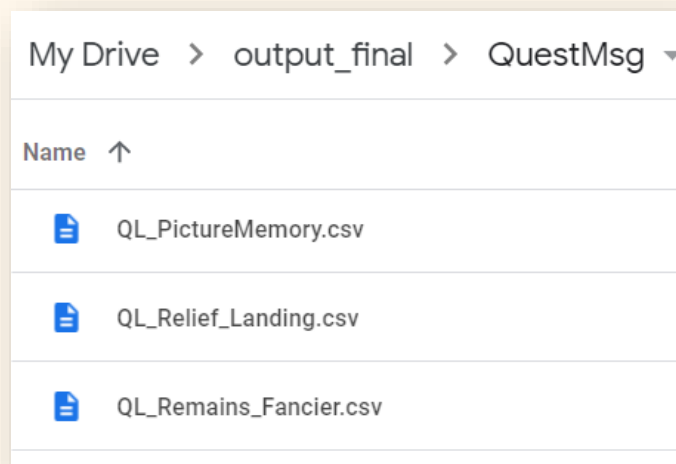


- ii. Alternatively, choose “**File Upload**” or “**Folder Upload**” from the “**+ New**” dropdown menu in the upper left corner.

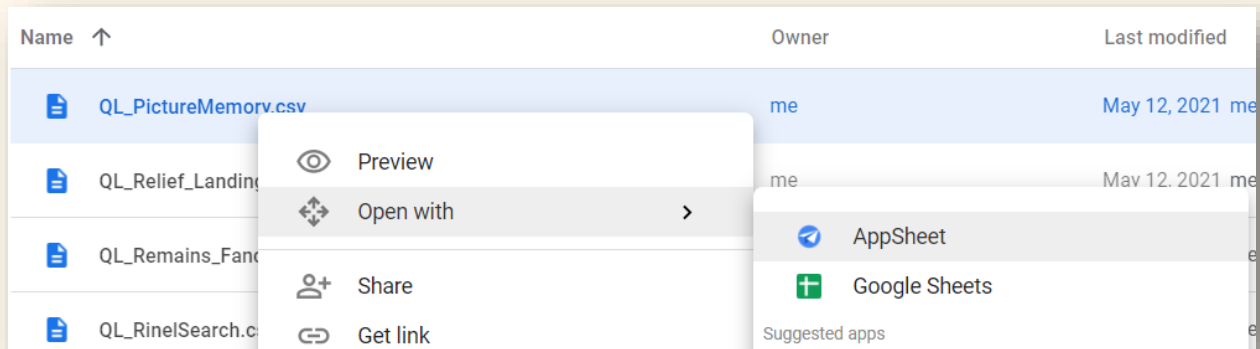




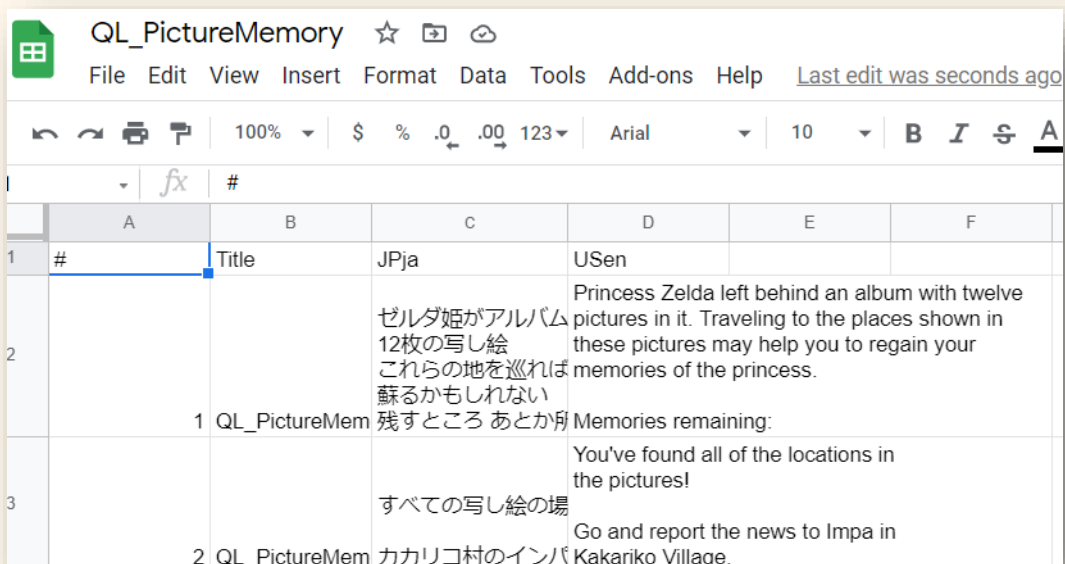
- c. For this example, I have uploaded the entire `output_final` directory to my Google Drive. Navigate to the folder that contains the file that you want to view. In this case, I want to look at `QL_PictureMemory.csv`.



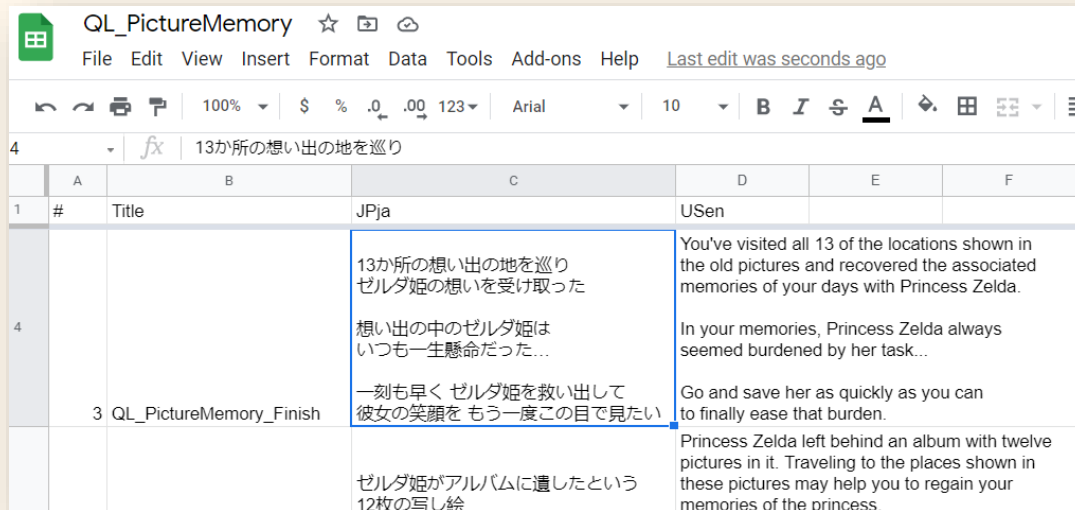
- d. Right-click on the file you want to view, and choose **Open with > Google Sheets**.



- e. The file will open up in Google Sheets, in a new tab.



- f. Adjust the columns so you can view the text in the way you need. Now you have successfully opened up one csv file for convenient viewing in Google Sheets!



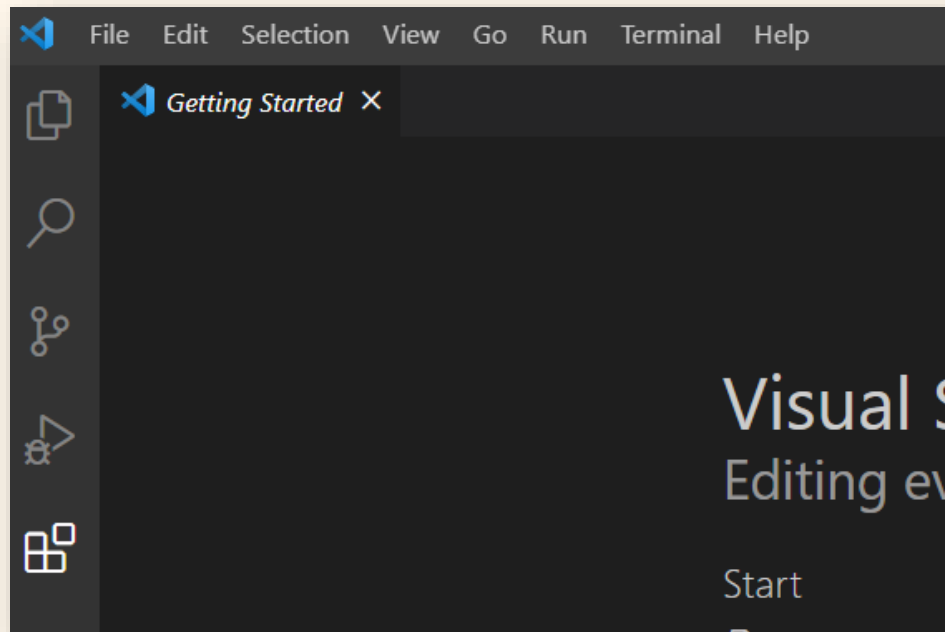
The screenshot shows a Google Sheet titled "QL_PictureMemory" with a menu bar (File, Edit, View, Insert, Format, Data, Tools, Add-ons, Help) and a toolbar. The sheet contains a table with 6 columns (A-F) and 4 rows. The data is as follows:

| | A | B | C | D | E | F |
|---|---|-------------------------|--|--|---|---|
| 1 | # | Title | JPja | USen | | |
| 4 | | | 13か所の思い出の地を巡り ゼルダ姫の想いを受け取った 思い出の中のゼルダ姫は いつも一生懸命だった... 一刻も早く ゼルダ姫を救い出して 彼女の笑顔を もう一度この目で見たい | You've visited all 13 of the locations shown in the old pictures and recovered the associated memories of your days with Princess Zelda. In your memories, Princess Zelda always seemed burdened by her task... Go and save her as quickly as you can to finally ease that burden. | | |
| | 3 | QL_PictureMemory_Finish | ゼルダ姫がアルバムに遺したという 12枚の写し絵 | Princess Zelda left behind an album with twelve pictures in it. Traveling to the places shown in these pictures may help you to regain your memories of the princess. | | |

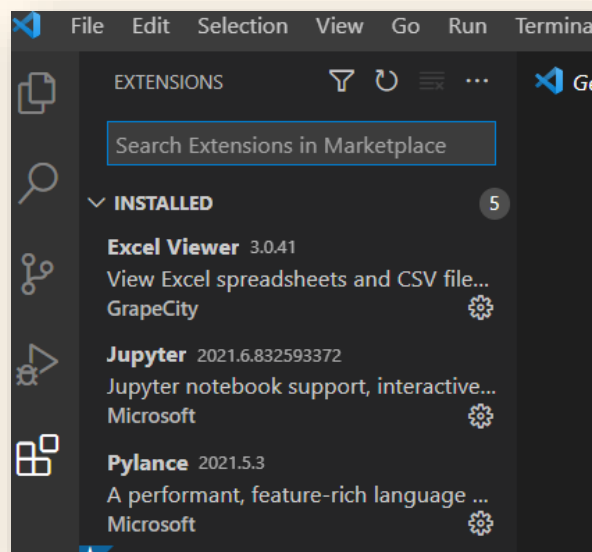
- g. Please note: Unfortunately, I haven't found a convenient way to do this in bulk for all of the csv files. From what I can tell, if you want to view everything at once, you will have to manually open each file in Google Sheets.

4. View with Visual Studio Code

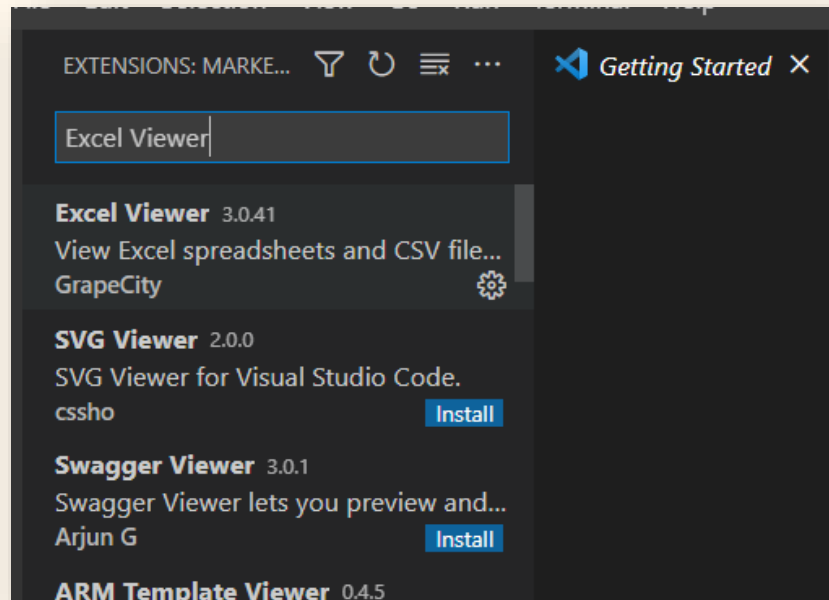
- a. Install the latest Stable Build of [Visual Studio Code](#).
- b. Open Visual Studio Code. Click on the **Extensions** icon on the left (highlighted white below). It looks like 4 squares grouped together.



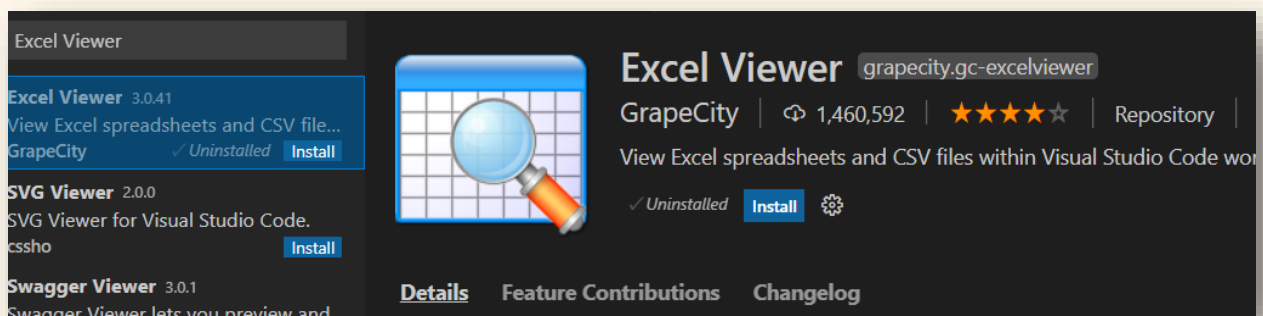
- c. You are now in the **Extensions** view. Enter “**Excel Viewer**” in the search bar (where it says “**Search Extensions in Marketplace**”).



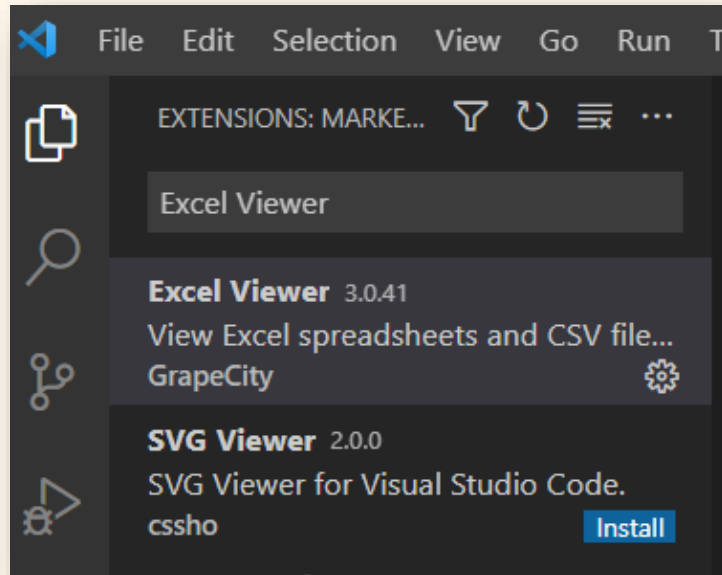
- d. In my previous screenshot, you may have noticed I already have the **Excel Viewer** extension installed. This extension, made by **GrapeCity**, should come up in your search results.



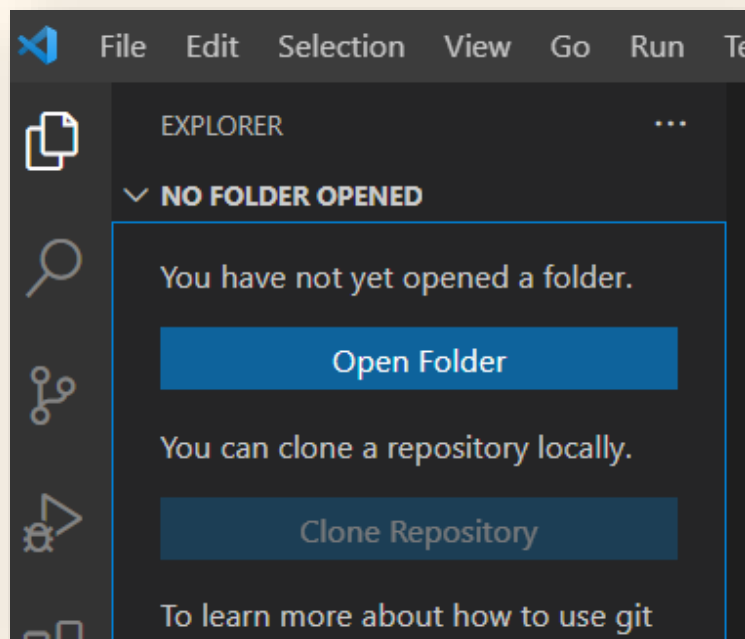
- e. Click on **Excel Viewer** and click on the blue **Install** button, next to the gear icon.



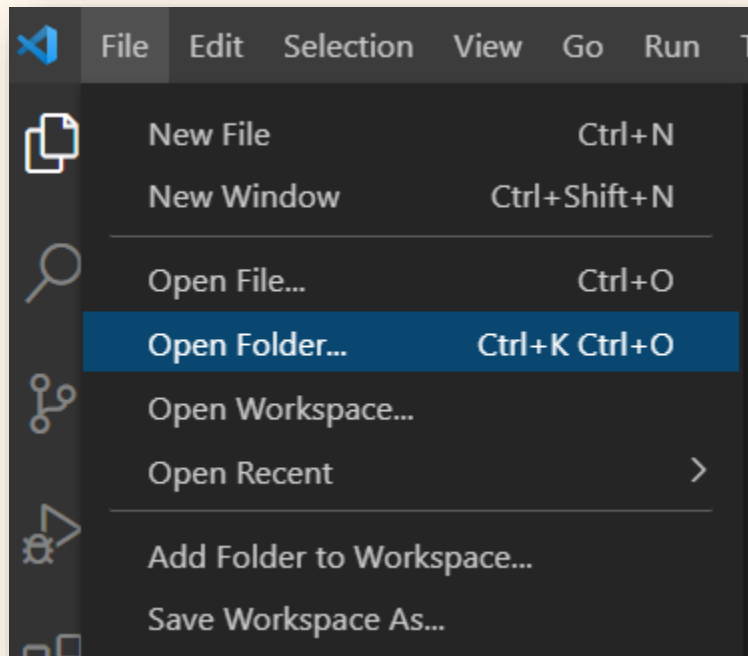
- f. Now that you have the **Excel Viewer** extension installed, click on the **Explorer** icon on the top left (highlighted in white below). It looks like two pieces of paper on top of each other.



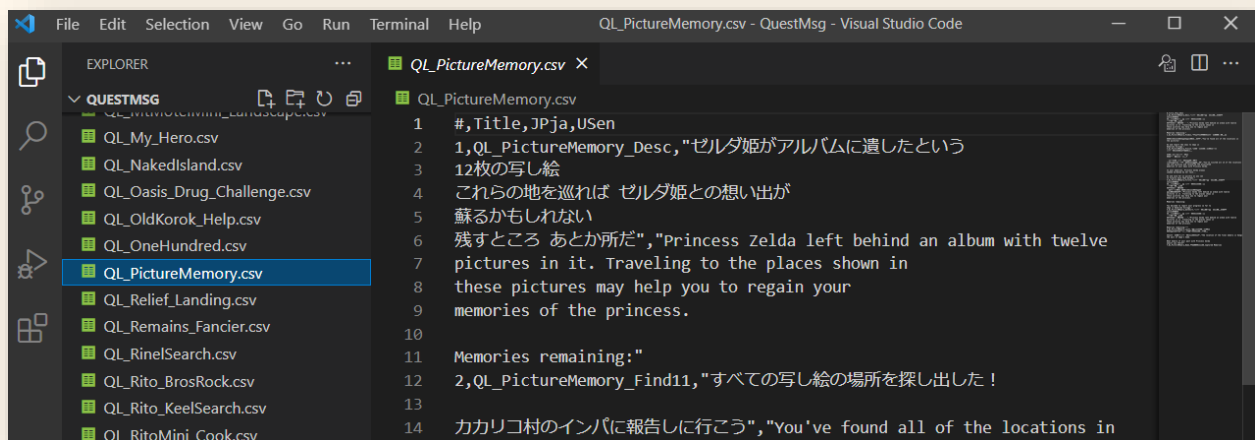
- g. In the **Explorer** view, click on the blue **Open Folder** button to choose one of the output_final subdirectories to open.



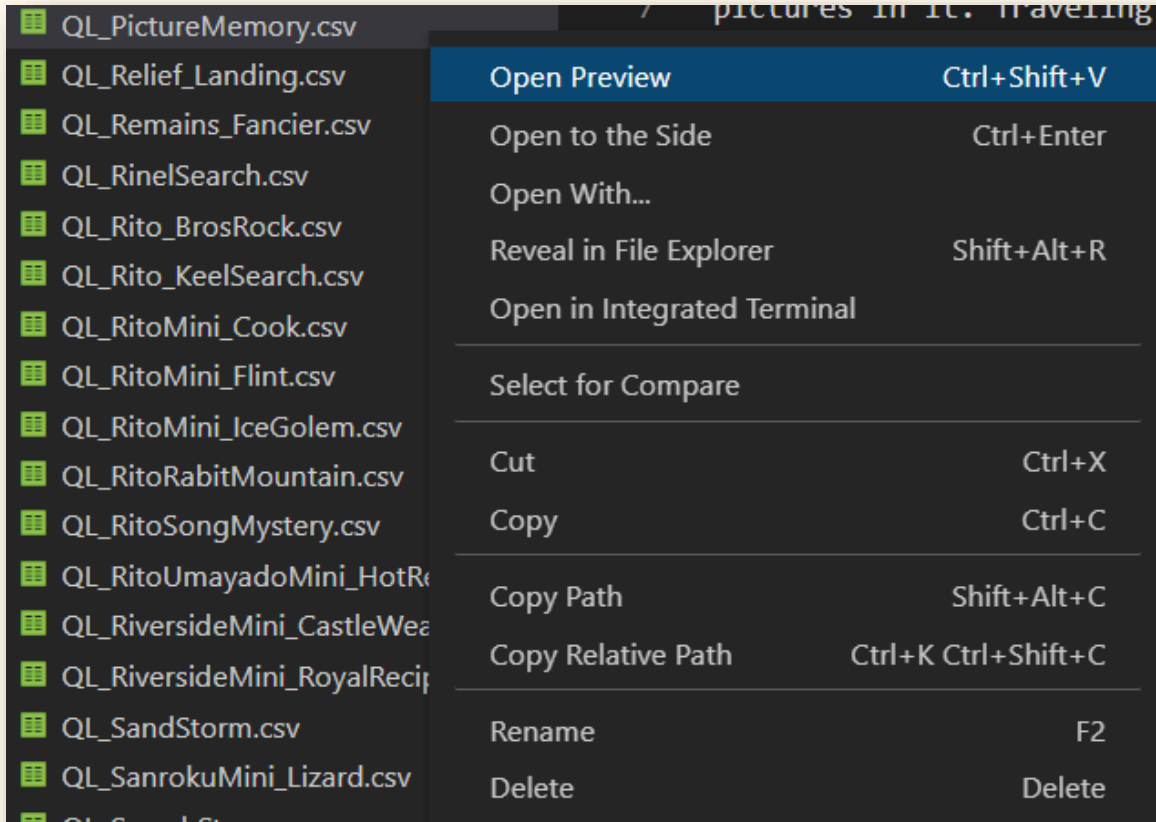
- h. Alternatively, you can open an `output_final` subdirectory using **File > Open Folder...** from the menu at the top of the window. You can also click **Open File...** (just above the **Open Folder...** option) to look at just one csv file at a time.



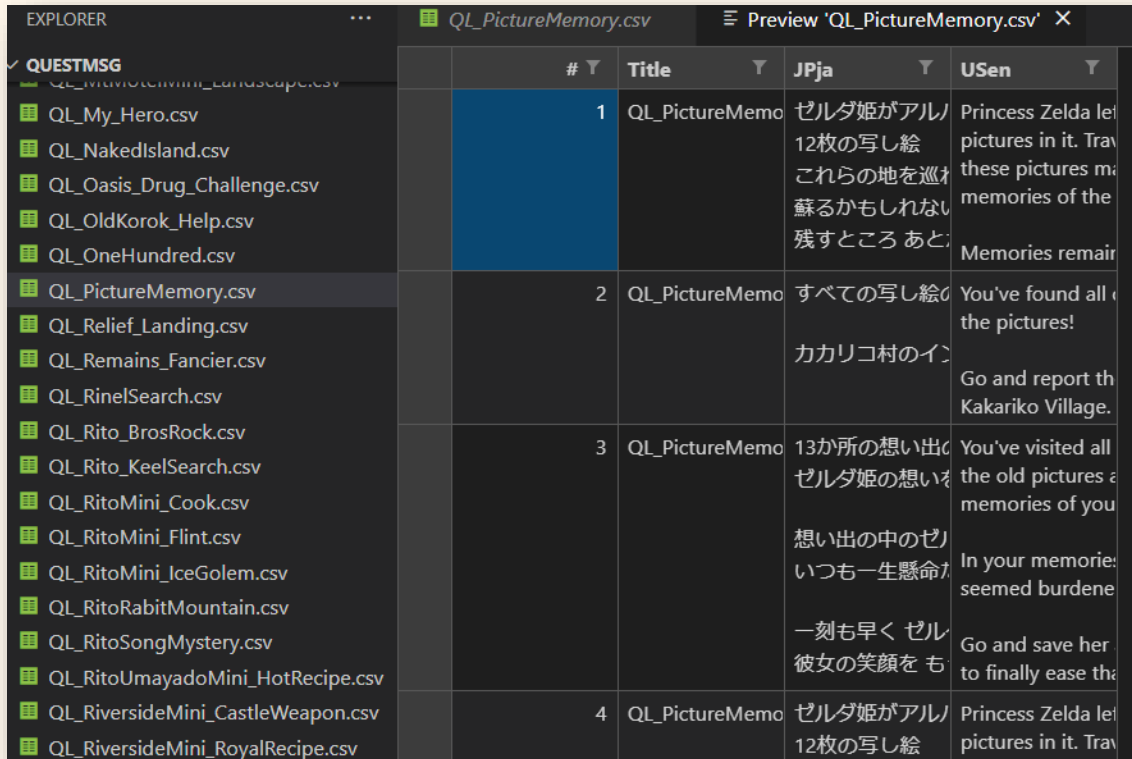
- i. In this example, I will open the **QuestMsg** subdirectory. Below is the default view in Visual Studio Code when looking at the csv file.



- j. To look at a csv file in the spreadsheet view, right-click the csv file you want to view, and choose **Open Preview** from the top of the dropdown menu (or use the keyboard shortcut **Ctrl+Shift+V**).

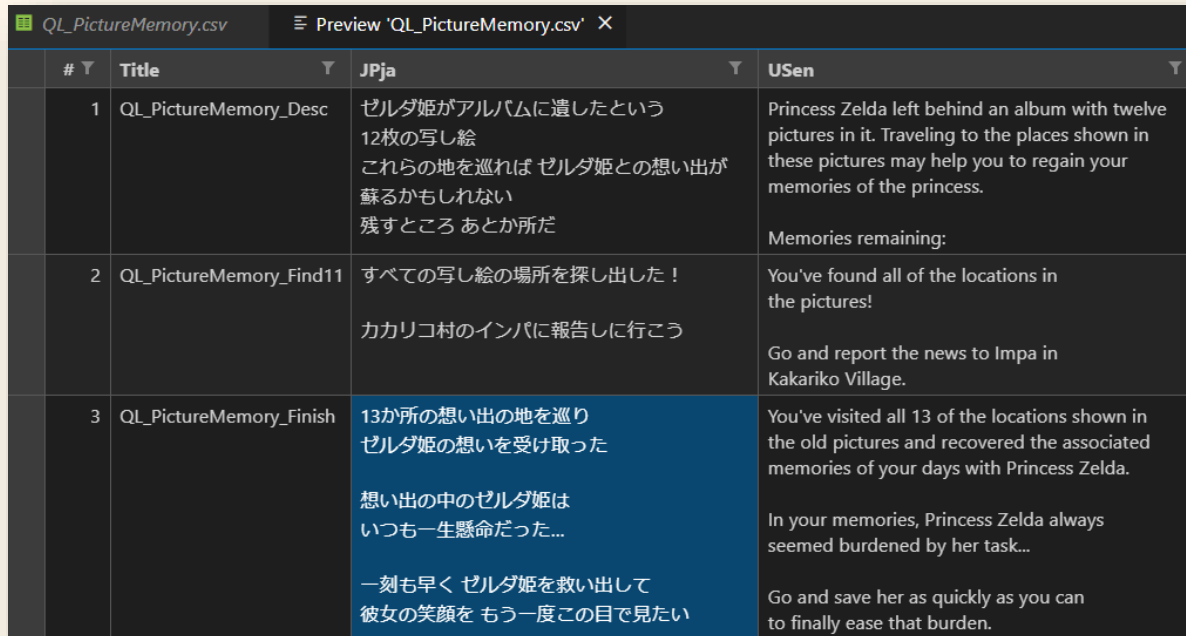


- k. A new **Preview** tab will open with the csv file in the spreadsheet view.
The columns will initially display at a fixed width such that the text is not fully visible.



| # | Title | JPja | USen |
|---|----------------|--|---|
| 1 | QL_PictureMemo | ゼルダ姫がアル 12枚の写し絵 これらの地を巡 蘇るかもしれな 残すところあと | Princess Zelda let pictures in it. Trav these pictures ma memories of the Memories remain |
| 2 | QL_PictureMemo | すべての写し絵 カカリコ村のイ | You've found all o the pictures! Go and report th Kakariko Village. |
| 3 | QL_PictureMemo | 13か所の思い出 ゼルダ姫の想い 思い出の中のゼ いつも一生懸命 一刻も早く ゼル 彼女の笑顔をも | You've visited all the old pictures a memories of you In your memories seemed burdene Go and save her to finally ease the |
| 4 | QL_PictureMemo | ゼルダ姫がアル 12枚の写し絵 | Princess Zelda let pictures in it. Trav |

- l. Use your cursor to adjust the column width to your liking. Now you have successfully opened up one csv file for convenient viewing in Visual Studio Code!



| # | Title | JPja | USen |
|---|-------------------------|--|--|
| 1 | QL_PictureMemory_Desc | ゼルダ姫がアルバムに遺したという 12枚の写し絵 これらの地を巡ればゼルダ姫との思い出が 蘇るかもしれない 残すところ あとか所だ | Princess Zelda left behind an album with twelve pictures in it. Traveling to the places shown in these pictures may help you to regain your memories of the princess. Memories remaining: |
| 2 | QL_PictureMemory_Find11 | すべての写し絵の場所を探し出した！ カカリコ村のインパに報告しに行こう | You've found all of the locations in the pictures! Go and report the news to Impa in Kakariko Village. |
| 3 | QL_PictureMemory_Finish | 13か所の思い出の地を巡り ゼルダ姫の思い出を受け取った 思い出の中のゼルダ姫は いつも一生懸命だった... 一刻も早くゼルダ姫を救い出して 彼女の笑顔を もう一度この目で見たい | You've visited all 13 of the locations shown in the old pictures and recovered the associated memories of your days with Princess Zelda. In your memories, Princess Zelda always seemed burdened by her task... Go and save her as quickly as you can to finally ease that burden. |

- m. As with Google Sheets, please note that I haven't found a convenient way preview the csv files in spreadsheet view in bulk. If you want to view everything at once, you will have to manually preview each file with the **Excel Viewer** extension.

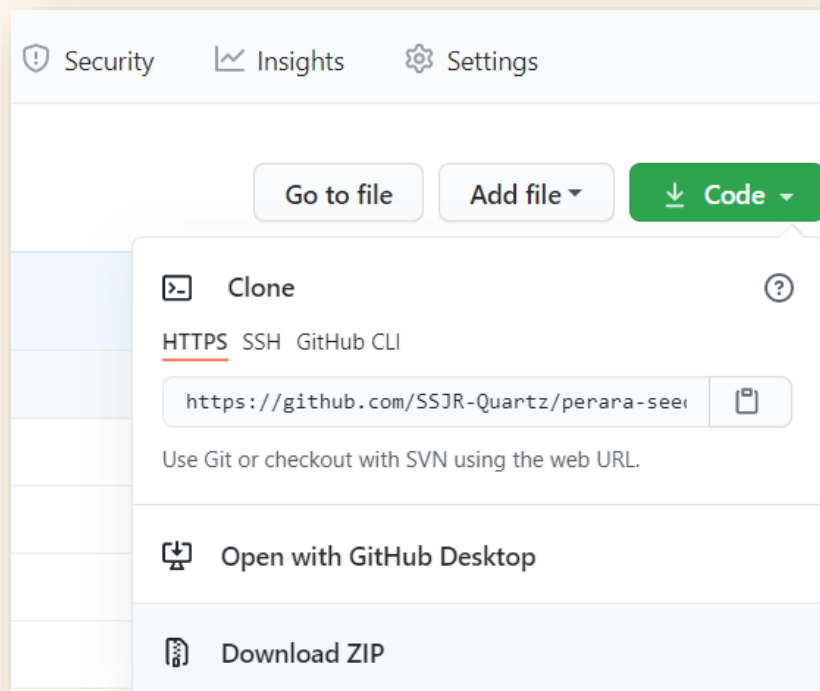
perara-seed

This part of the guide will show you how to generate the full Japanese-English comparison output on your own, and also set you up with msyt-tools, which can be used to put text edits into *Breath of the Wild*.

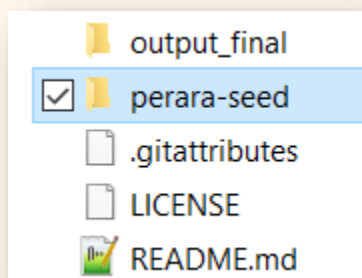
msyt-tools will be used in this guide solely to acquire the Japanese and English text input for the perara-seed script.

Instructions for generating output:

1. If you have not already done so from **Step 1** for viewing the **output_final** directory, download the perara-seed repository into a ZIP file, by navigating to the green “Code” button on the perara-seed repository homepage, and clicking “Download ZIP” at the bottom of the dropdown menu.



2. Extract the zip file. Open the perara-seed directory. Inside, you will see just the perara-seed.py script.

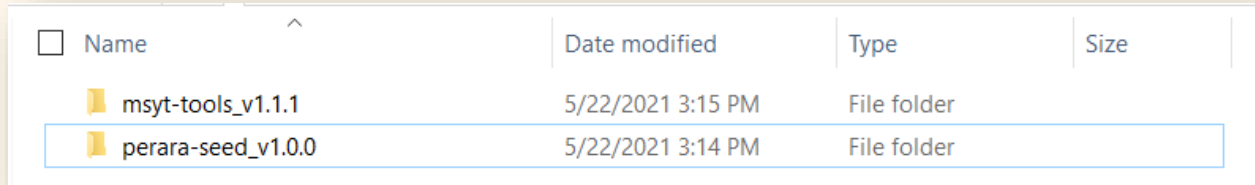


| Search perara-seed | | | | |
|-------------------------------|-------------------|-------------|-------|--|
| <input type="checkbox"/> Name | Date modified | Type | Size | |
| perara-seed-V1.5.5.py | 5/16/2021 6:08 PM | Python File | 46 KB | |

3. Inside of this directory, make two new folders. Name one of the new folders “msyt_JP,” and the other “msyt_EN.” The perara-seed directory should now look like this:

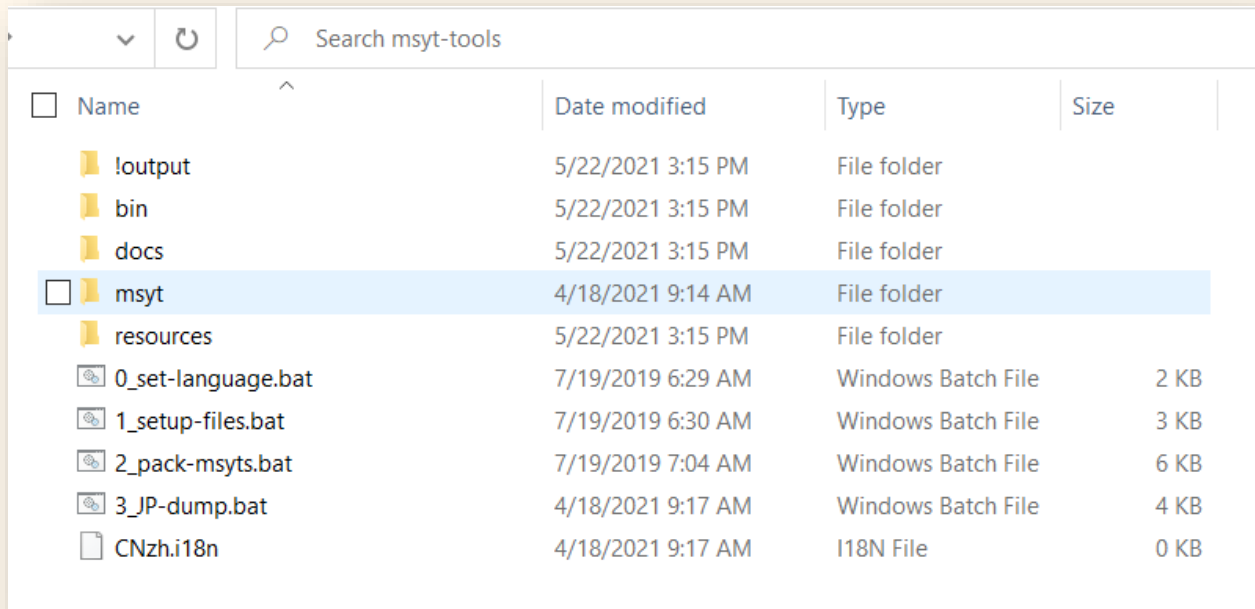
| Search perara-seed | | | | |
|-------------------------------|-------------------|-------------|-------|--|
| <input type="checkbox"/> Name | Date modified | Type | Size | |
| msyt_EN | 5/22/2021 3:10 PM | File folder | | |
| msyt_JP | 5/22/2021 3:09 PM | File folder | | |
| perara-seed-V1.5.5.py | 5/16/2021 6:08 PM | Python File | 46 KB | |

- Outside of the perara-seed **repository**, install [msyt-tools](#). You can use [this PDF guide](#) for reference. The guide will also include instructions for installing **Python**, **sarc**, and **rstb**. Your folders may look like this afterwards:



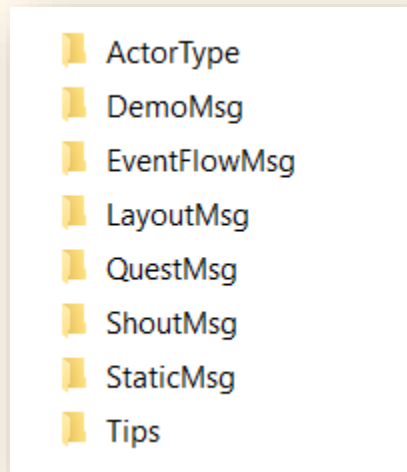
| <input type="checkbox"/> Name | Date modified | Type | Size |
|-------------------------------|-------------------|-------------|------|
| msyt-tools_v1.1.1 | 5/22/2021 3:15 PM | File folder | |
| perara-seed_v1.0.0 | 5/22/2021 3:14 PM | File folder | |

- In the same place that you installed **sarc** and **rstb**, install **unicodecsv** with the following command: `pip install unicondecsv`
- In the same location, install **tqdm** with the following command: `pip install tqdm`
- Using the **msyt-tools** docs as your guide, dump the Japanese (JPja) msyt files in the **msyt** folder in **msyt-tools**.

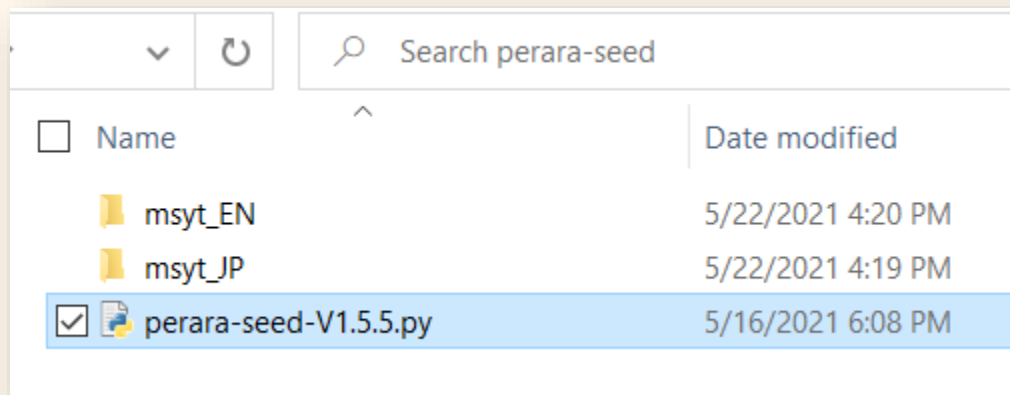


| <input type="checkbox"/> Name | Date modified | Type | Size |
|--|-------------------|--------------------|------|
| !output | 5/22/2021 3:15 PM | File folder | |
| bin | 5/22/2021 3:15 PM | File folder | |
| docs | 5/22/2021 3:15 PM | File folder | |
| <input checked="" type="checkbox"/> msyt | 4/18/2021 9:14 AM | File folder | |
| resources | 5/22/2021 3:15 PM | File folder | |
| 0_set-language.bat | 7/19/2019 6:29 AM | Windows Batch File | 2 KB |
| 1_setup-files.bat | 7/19/2019 6:30 AM | Windows Batch File | 3 KB |
| 2_pack-msyts.bat | 7/19/2019 7:04 AM | Windows Batch File | 6 KB |
| 3_JP-dump.bat | 4/18/2021 9:17 AM | Windows Batch File | 4 KB |
| CNzh.i18n | 4/18/2021 9:17 AM | I18N File | 0 KB |

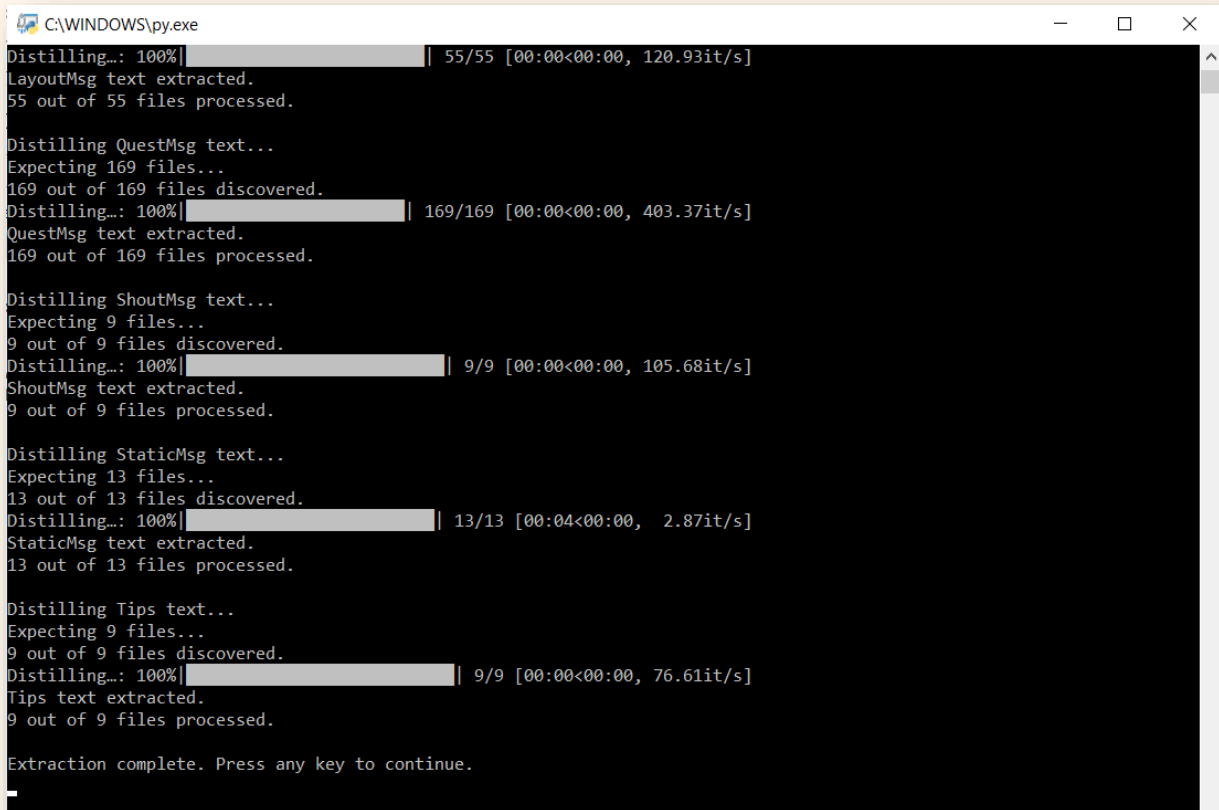
8. Once you have the Japanese msyt files, the **msyt** directory should contain these 8 subfolders:



9. Remember the new folder we made in the **perara-seed** directory, titled **msyt_JP**? Move all 8 subfolders from the previous step to **msyt_JP** now.
10. Repeat steps 7-9 such that the English (USen) msyt files are put into the **msyt_EN** folder in the **perara-seed** directory this time.
11. Now that you have your input, run the **perara-seed** Python file by double-clicking on it.



12. A console window should pop up, and a bunch of text will display. As the final line will say, “**Press any key to continue**” once the program has completed.



```
C:\WINDOWS\py.exe
Distilling...: 100% | 55/55 [00:00<00:00, 120.93it/s]
LayoutMsg text extracted.
55 out of 55 files processed.

Distilling QuestMsg text...
Expecting 169 files...
169 out of 169 files discovered.
Distilling...: 100% | 169/169 [00:00<00:00, 403.37it/s]
QuestMsg text extracted.
169 out of 169 files processed.

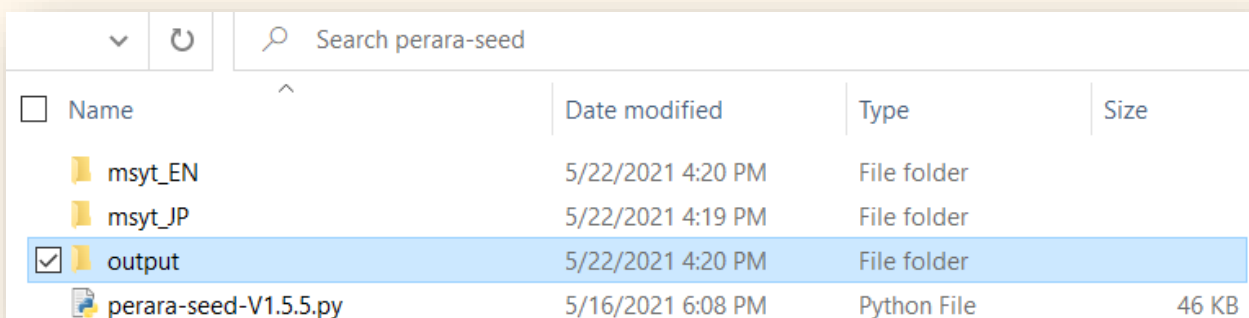
Distilling ShoutMsg text...
Expecting 9 files...
9 out of 9 files discovered.
Distilling...: 100% | 9/9 [00:00<00:00, 105.68it/s]
ShoutMsg text extracted.
9 out of 9 files processed.

Distilling StaticMsg text...
Expecting 13 files...
13 out of 13 files discovered.
Distilling...: 100% | 13/13 [00:04<00:00, 2.87it/s]
StaticMsg text extracted.
13 out of 13 files processed.

Distilling Tips text...
Expecting 9 files...
9 out of 9 files discovered.
Distilling...: 100% | 9/9 [00:00<00:00, 76.61it/s]
Tips text extracted.
9 out of 9 files processed.

Extraction complete. Press any key to continue.
```

13. Inside the **perara-seed** directory, you should now see a new folder called **output**. This folder contains the full Japanese-English text comparison in csv files, which is the exact same content as that of the **output_final** directory covered earlier in this guide. You have now successfully run the **perara-seed** script!



| Search perara-seed | | | | |
|-------------------------------------|-----------------------|-------------------|-------------|-------|
| <input type="checkbox"/> | Name | Date modified | Type | Size |
| | msyt_EN | 5/22/2021 4:20 PM | File folder | |
| | msyt_JP | 5/22/2021 4:19 PM | File folder | |
| <input checked="" type="checkbox"/> | output | 5/22/2021 4:20 PM | File folder | |
| | perara-seed-V1.5.5.py | 5/16/2021 6:08 PM | Python File | 46 KB |