

Extra Credit 3 - MARC & Pymarc

This extra credit assignment will be very similar to Assignment 4. But instead of reading a `csv` file and producing a `json` file, you will read a `mrc` file and write to a `csv` file.

You should be able to run your file by calling the following:

```
python3 extra3.py
```

Submission:

- Create a file named **extra3.py**
- Put your name in a comment at the top
- Submit it via CCLE

This extra credit assignment is worth an extra 4% towards your final grade.

Part 0 - Set Up

To use the Pymarc package you will need to install it using **pip**.

```
pip install pymarc
```

If you have both Python2 and Python3 installed (most Mac users) be sure to indicate that you want to install it for Python3 by using **pip3** instead.

```
pip3 install pymarc
```

Part 1 - Read the MARC data

- Use the **sample_marc.mrc** file as the source of data.
- Open the file using the `pymarc` library. See the week 7 lecture notes for an example of how to do this.
- Grab the following fields from each record:
 - The *title* from field **245** subfields **a** and **b**. You can use the `title()` convenience method instead of grabbing the individual subfields.
 - The *year published* from field **260** subfield **c**. You can use the `pubyear()` convenience method instead.
 - The *URL* for the digital copy from field **856** subfield **u**.
 - The *call number* from field **090**.

- Once you grab the 090 field, use the `format_field()` method to convert the subfields into a nice single string:

```
field = record['090']  
string = field.format_field()
```

- *Beware!* Not all records have a call number. So test it before you call the `format_field()` method. If the record does not have a call number, use an empty string.

Part 2 - Save the Selected Data

- Now save the data for each record in a row in a CSV file like so:

title,pubyear,url,callnum

- Save the file as **marc_data.csv**