EXIF Challenge

The Challenge:

1. Write a Python program that:
    - Reads all `.CR2` files in a given directory.
    - Extracts the following EXIF metadata for each file:
        - **DateTimeOriginal** (when the photo was taken).
        - **FNumber** (aperture).
        - **ExposureTime** (shutter speed).
        - **ISOSpeedRatings** (ISO settings).
        - **CameraModel**
        - **LensModel**
        - **GPSLatitude** and **GPSLongitude** (if available).
    - Converts the GPS data (if present) to decimal format.

2. Create a Pandas DataFrame to store the metadata with the following columns:
    - `Filename` : The name of the image file.
    - `DateTimeOriginal` : The date and time the photo was taken.
    - `FNumber` : Aperture value.
    - `ExposureTime` : Shutter speed.
    - `ISOSpeedRatings` : ISO settings.
    - `CameraModel` : Camera brand and model
    - `LenModel` : Lens Model
    - `Latitude` : Latitude in decimal format (or `None` if unavailable).
    - `Longitude` : Longitude in decimal format (or `None` if unavailable).
3. Save the DataFrame to a CSV file (e.g., `image_metadata.csv`).

Bonus Task:

If GPS data is found:

- Use the latitude and longitude to find the location on a map (hint: Use an online service like Google Maps or OpenStreetMap).

Hints:

- Once you've processed the metadata, you can open Google Maps with a URL like:

https://www.google.com/maps?q=37.24867,-121.78758