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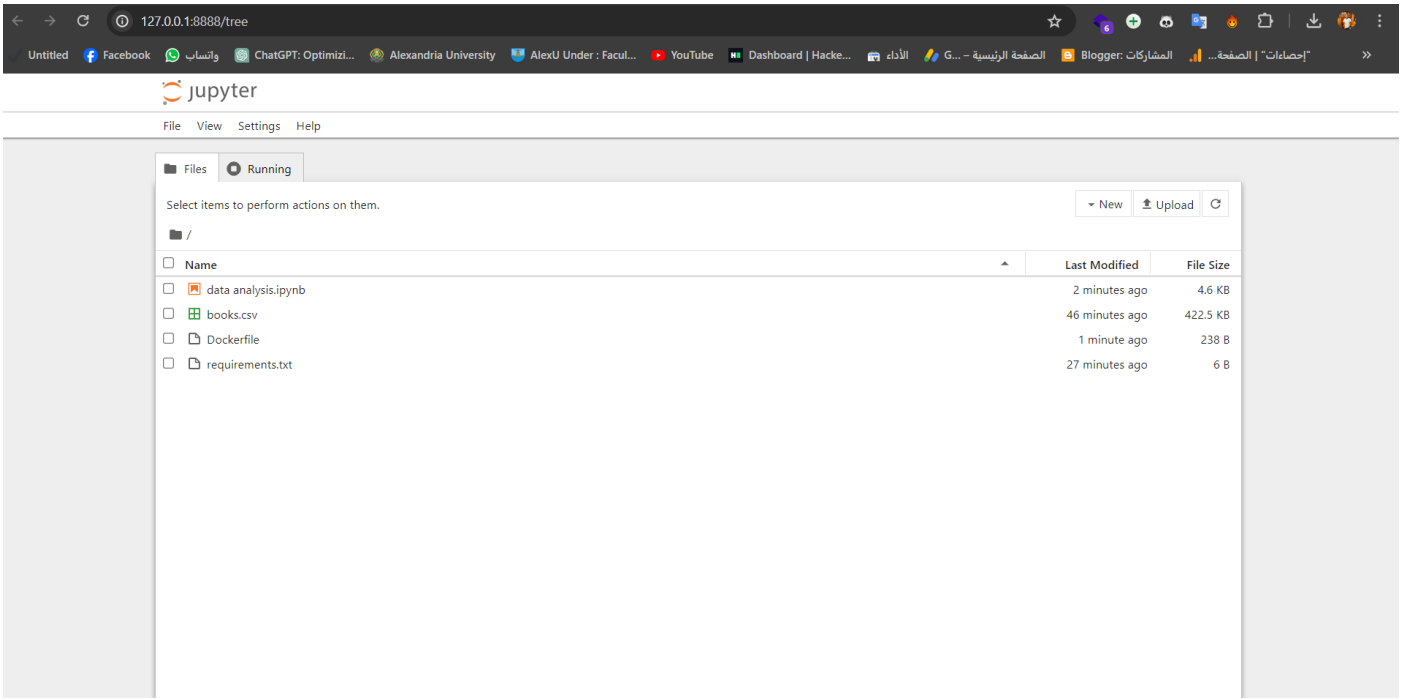
Assignment 2

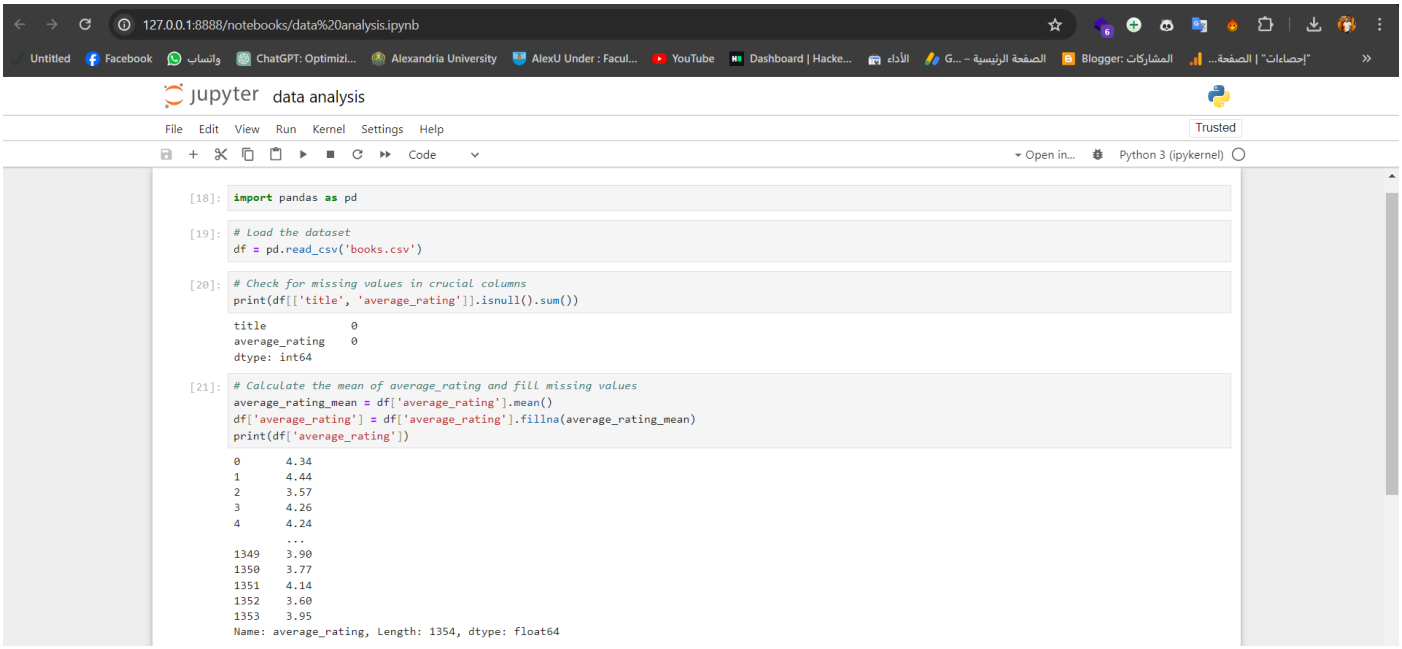
Dockerfile

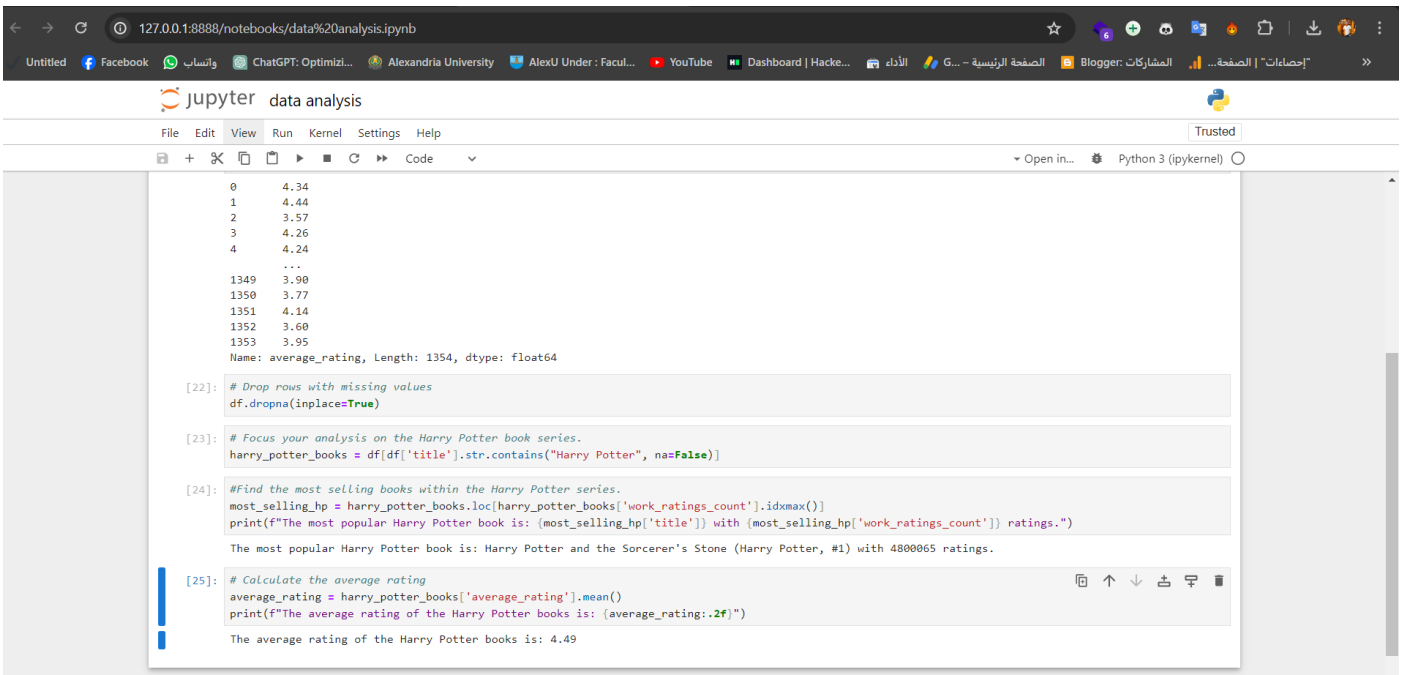
```
FROM jupyter/datascience-notebook

WORKDIR /usr/src/app

COPY . /usr/src/app

RUN pip install -r requirements.txt

EXPOSE 8888

CMD ["jupyter", "notebook", "--ip='0.0.0.0'", "--port=8888", "--no-browser", "--allow-root"]
```

Windows PowerShell

```
PS C:\Users\LENOVO\Desktop\Assignment 2> docker build -t my-jupyter-notebook .
[+] Building 0.0s (0/0)  docker:default
2024/04/24 12:04:57 http2: server: error reading preface from client //./pipe/docker_engine: file has already been close
[+] Building 3.5s (9/9) FINISHED                                                                    docker:default
 => [internal] load build definition from Dockerfile                                                        0.0s
 => => transferring dockerfile: 277B                                                                        0.0s
 => [internal] load metadata for docker.io/jupyter/datascience-notebook:latest                              0.0s
 => [internal] load .dockerignore                                                                           0.0s
 => => transferring context: 2B                                                                             0.0s
 => [1/4] FROM docker.io/jupyter/datascience-notebook:latest                                                0.0s
 => [internal] load build context                                                                           0.0s
 => => transferring context: 5.06kB                                                                         0.0s
 => CACHED [2/4] WORKDIR /usr/src/app                                                                       0.0s
 => [3/4] COPY . /usr/src/app                                                                               0.1s
 => [4/4] RUN pip install -r requirements.txt                                                               2.9s
 => exporting to image                                                                                      0.2s
 => => exporting layers                                                                                     0.1s
 => => writing image sha256:2a5884b97e80191e1912487c2e7e0b1ef90eb0d1358ab51c618aa1a245a5464f                0.0s
 => => naming to docker.io/library/my-jupyter-notebook                                                      0.0s

View build details: docker-desktop://dashboard/build/default/default/tc03ryf0pd9azecjta86ox3ed

What's Next?
  View a summary of image vulnerabilities and recommendations → docker scout quickview
PS C:\Users\LENOVO\Desktop\Assignment 2>
```







Analysis :

- Find the most selling books within the Harry Potter series.

```
#Find the most selling books within the Harry Potter series.
most_selling_hp = harry_potter_books.loc[harry_potter_books['work_ratings_count'].idxmax()]
print(f"The most popular Harry Potter book is: {most_selling_hp['title']} with {most_selling_hp['work_ratings_count']} ratings.")
```

```
The most popular Harry Potter book is: Harry Potter and the Sorcerer's Stone (Harry Potter, #1) with 4800065 ratings.
```

Harry Potter and the Sorcerer's Stone (Harry Potter, #1) with 4800065 ratings.

- Calculate the average rating of the Harry Potter books.

```
[25]: # Calculate the average rating
average_rating = harry_potter_books['average_rating'].mean()
print(f"The average rating of the Harry Potter books is: {average_rating:.2f}")
```

```
The average rating of the Harry Potter books is: 4.49
```

4.49