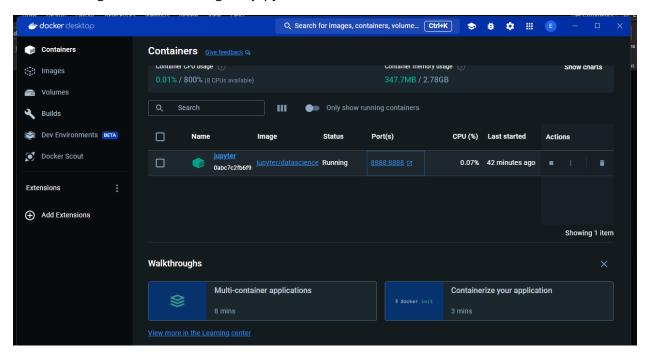
## Eyad Tamer Shehata Mahmoud

2103116

## Final Results:

After installing docker and linking it to jupyter:



For the data preprocessing, selecting only Harry potter books and used the column books\_count because there were no sales column, also the results after calculating the average rating:

```
+ % ☐ ☐ ▶ ■ C → Code
•[14]: missing_values = df.isnull().sum()
print("Missing_values:")
          print(missing_values)
          df = df.drop_duplicates(subset=['title'], keep='first')
         Missing values:
book_id
goodreads_book_id
                                                  0
0
          best_book_id
          work_id
books_count
                                                  0
          isbn
          isbn13
                                                  44
          authors
          original_publication_year
          original_title
          title
                                                  0
          language_code
                                                109
          average_rating ratings_count
                                                  0
          work_ratings_count
work_text_reviews_count
ratings_1
                                                  0
          ratings_2
          ratings_3
          ratings_4
          ratings_5
          image_url
small_image_url
          dtype: int64
```

```
494926
     10
                                            1195045
             20210
                       151785
                                  494427
     8
             31577
                       180210
                                            1124806
                                                 image_url \
     1
         https://images.gr-assets.com/books/1474154022m...
         https://images.gr-assets.com/books/1474169725m...
     9
     6
         https://images.gr-assets.com/books/1499277281m...
     10 https://images.gr-assets.com/books/1361482611m...
     8 https://images.gr-assets.com/books/1387141547m...
                                           small_image_url
         https://images.gr-assets.com/books/1474154022s...
     1
         https://images.gr-assets.com/books/1474169725s...
     6
         https://images.gr-assets.com/books/1499277281s...
     10 https://images.gr-assets.com/books/1361482611s...
         https://images.gr-assets.com/books/1387141547s...
     [5 rows x 23 columns]
[15]: average_rating = harry_potter_df['average_rating'].mean()
     print("Average rating of Harry Potter books:", average_rating)
     Average rating of Harry Potter books: 4.4827272727273
```