# Alexandria University Faculty of Computer and Data Science Business Department



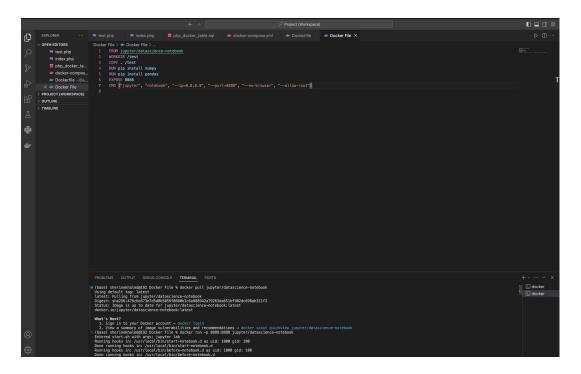
## Cloud Computing 2023-2024

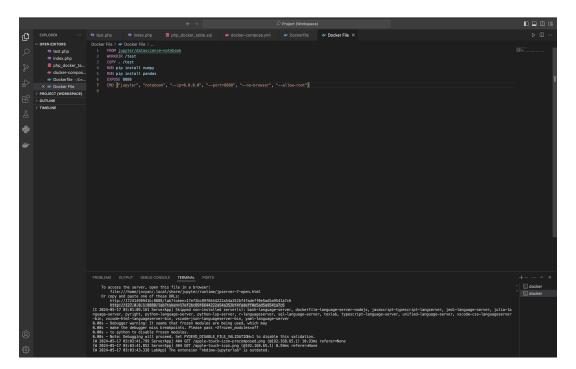
#### **Sherine Khaled Mohamed**

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### Presented to: Eng. Sara Eldesouky

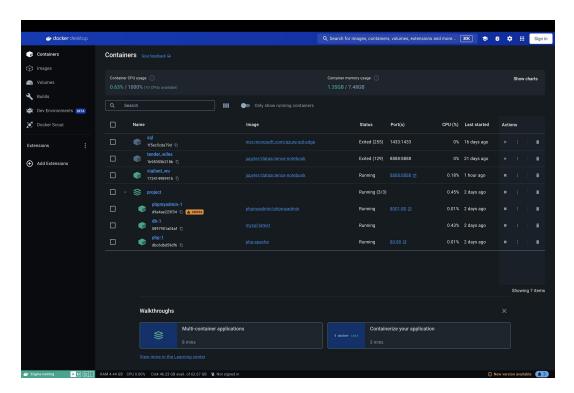
#### 1- Docker File



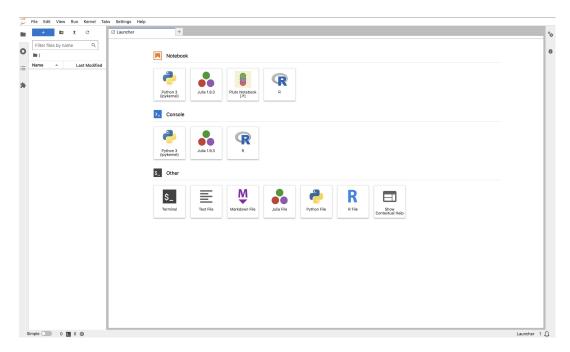


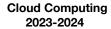


#### 2- Docker Container



#### 3- Jupyter Notebook







#### 4- Analysis

Apply data cleaning and preprocessing on popular books dataset then apply analysis on Harry Potter series to discover most selling books and average rating as shown in Harry Potter.ipynb)

Analysis shows that the average rating is 4.497 and the most selling series is Harry Potter and the Sorcerer's Stone

```
[27]: print(hp)
                                           authors original_publication_year \
                       J.K. Rowling, Mary GrandPré
                                                                       1997.0
           J.K. Rowling, Mary GrandPré, Rufus Beck
       6
                                                                       1999.0
       8
                       J.K. Rowling, Mary GrandPré
                                                                       2003.0
                       J.K. Rowling, Mary GrandPré
                                                                       1998.0
                       J.K. Rowling, Mary GrandPré
       10
                                                                       2000.0
       11
                       J.K. Rowling, Mary GrandPré
                                                                       2007.0
                       J.K. Rowling, Mary GrandPré
                                                                       2005.0
       12
                                                       title average_rating
          Harry Potter and the Sorcerer's Stone (Harry P...
           Harry Potter and the Prisoner of Azkaban (Harr...
           Harry Potter and the Order of the Phoenix (Har...
                                                                        4.46
          Harry Potter and the Chamber of Secrets (Harry...
                                                                        4.37
       10 Harry Potter and the Goblet of Fire (Harry Pot...
                                                                        4.53
       11 Harry Potter and the Deathly Hallows (Harry Po...
                                                                        4.61
       12 Harry Potter and the Half-Blood Prince (Harry ...
                                                                        4.54
           ratings_count
       1
                 4602479
       6
                 1832823
       8
                 1735368
       9
                 1779331
       10
                 1753043
       11
                 1746574
                 1678823
•[28]: #calculate average rating of Harry Potter books
       hp.loc[:, 'average_rating'].mean()
 [28]: 4.497142857142857
•[29]: #find most selling books within the Harry Potter series
       hp['ratings_count'].max()
 [29]: 4602479
```