Data analysis on the Harry Potter book series.

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Healthcare Analytics

Cloud computing assignment

1. Displaying Dataset columns

```
Data columns (total 23 columns):
 #   Column                     Non-Null Count   Dtype
---  ------                     --------------   -----
 0   book_id                    1354 non-null    int64
 1   goodreads_book_id          1354 non-null    int64
 2   best_book_id               1354 non-null    int64
 3   work_id                    1354 non-null    int64
 4   books_count                1354 non-null    int64
 5   isbn                       1302 non-null    object
 6   isbn13                     1310 non-null    float64
 7   authors                    1354 non-null    object
 8   original_publication_year  1351 non-null    float64
 9   original_title             1302 non-null    object
 10  title                      1354 non-null    object
 11  language_code              1245 non-null    object
 12  average_rating             1354 non-null    float64
 13  ratings_count              1354 non-null    int64
 14  work_ratings_count         1354 non-null    int64
 15  work_text_reviews_count    1354 non-null    int64
 16  ratings_1                  1354 non-null    int64
 17  ratings_2                  1354 non-null    int64
 18  ratings_3                  1354 non-null    int64
 19  ratings_4                  1354 non-null    int64
 20  ratings_5                  1354 non-null    int64
 21  image_url                  1354 non-null    object
 22  small_image_url            1354 non-null    object
dtypes: float64(3), int64(13), object(7)
memory usage: 243.4+ KB
```
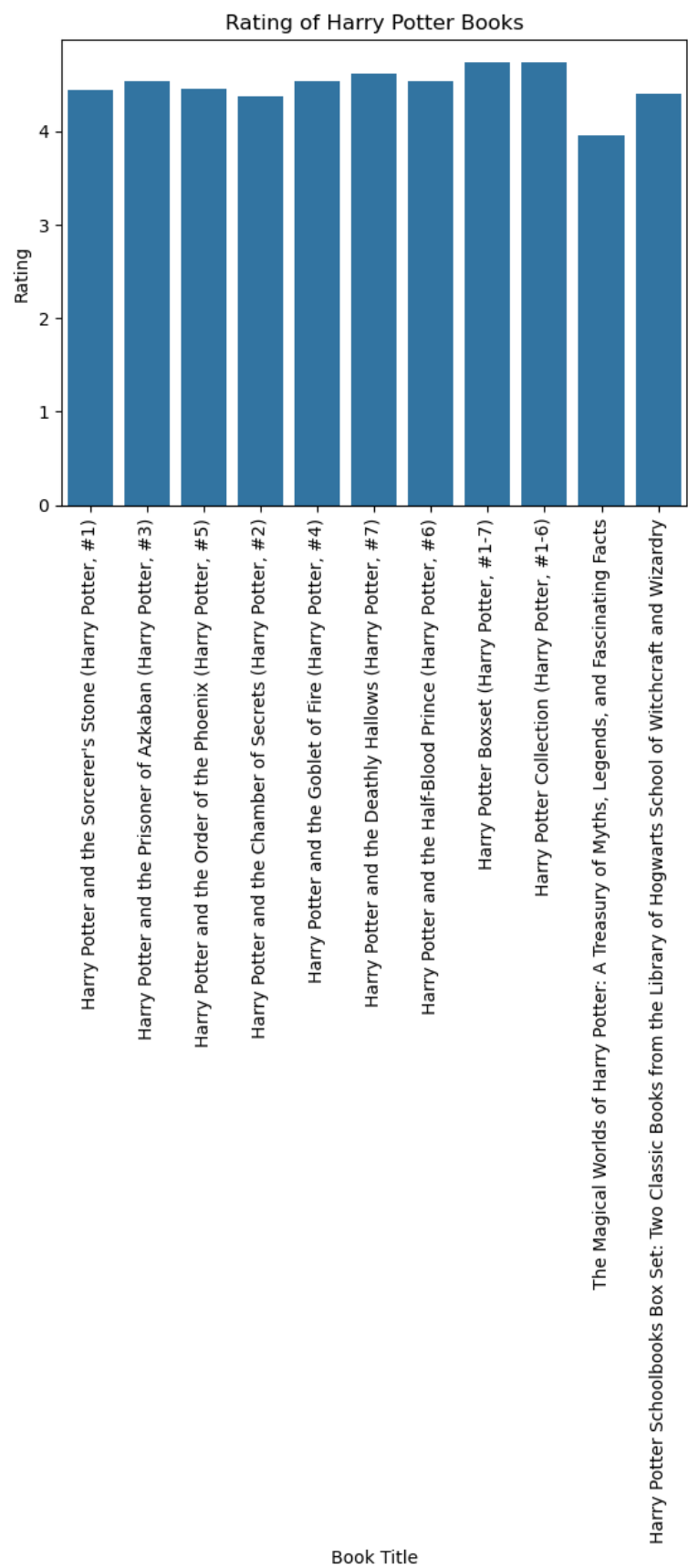
2. Displaying numerical staticstics of columns

	book_id	goodreads_book_id	best_book_id	work_id	books_count	isbn13	original_publication_year	average_rating	ratings_count	work_ratings
count	1354.000000	1.354000e+03	1.354000e+03	1.354000e+03	1354.000000	1.310000e+03	1351.000000	1354.000000	1.354000e+03	1.3540
mean	4453.584195	5.951852e+06	6.120589e+06	8.707028e+06	50.330871	9.766700e+12	2003.422650	3.999357	9.160429e+04	9.9155
std	2894.277455	6.664595e+06	6.935008e+06	9.813696e+06	61.338867	3.572069e+11	16.779301	0.224263	2.871266e+05	3.0236
min	1.000000	1.000000e+00	1.000000e+00	1.150000e+02	1.000000	7.678361e+10	1868.000000	3.230000	6.221000e+03	8.8330
25%	1860.250000	1.537868e+05	1.537962e+05	1.375035e+06	22.000000	9.780152e+12	2003.000000	3.850000	1.759325e+04	1.9181
50%	4177.500000	3.305318e+06	3.422646e+06	4.005716e+06	37.000000	9.780440e+12	2008.000000	4.000000	2.943000e+04	3.2551
75%	6814.500000	9.917380e+06	1.019388e+07	1.435717e+07	58.000000	9.780805e+12	2011.000000	4.160000	6.073800e+04	6.6812
max	9955.000000	3.207567e+07	3.360215e+07	4.963819e+07	1314.000000	9.788424e+12	2017.000000	4.740000	4.780653e+06	4.9423

3.average harry potter ratings

Rating of Harry Potter Books

Rating (y-axis)

Book Title (x-axis)

Categories:
- Harry Potter and the Sorcerer's Stone (Harry Potter, #1)
- Harry Potter and the Prisoner of Azkaban (Harry Potter, #3)
- Harry Potter and the Order of the Phoenix (Harry Potter, #5)
- Harry Potter and the Chamber of Secrets (Harry Potter, #2)
- Harry Potter and the Goblet of Fire (Harry Potter, #4)
- Harry Potter and the Deathly Hallows (Harry Potter, #7)
- Harry Potter and the Half-Blood Prince (Harry Potter, #6)
- Harry Potter Boxset (Harry Potter, #1-7)
- Harry Potter Collection (Harry Potter, #1-6)
- The Magical Worlds of Harry Potter: A Treasury of Myths, Legends, and Fascinating Facts
- Harry Potter Schoolbooks Box Set: Two Classic Books from the Library of Hogwarts School of Witchcraft and Wizardry

4. Top-rated Harry Potter Books by Total Ratings Count:

	title	ratings_count
9	Harry Potter and the Sorcerer's Stone (Harry P...	4602479
8	Harry Potter and the Prisoner of Azkaban (Harr...	1832823
3	Harry Potter and the Chamber of Secrets (Harry...	1779331
5	Harry Potter and the Goblet of Fire (Harry Pot...	1753043
4	Harry Potter and the Deathly Hallows (Harry Po...	1746574
7	Harry Potter and the Order of the Phoenix (Har...	1735368
6	Harry Potter and the Half-Blood Prince (Harry ...	1678823
0	Harry Potter Boxset (Harry Potter, #1-7)	190050
1	Harry Potter Collection (Harry Potter, #1-6)	24618
10	The Magical Worlds of Harry Potter: A Treasury...	13820

5.

Top-rated Harry Potter Books by Total Ratings Count
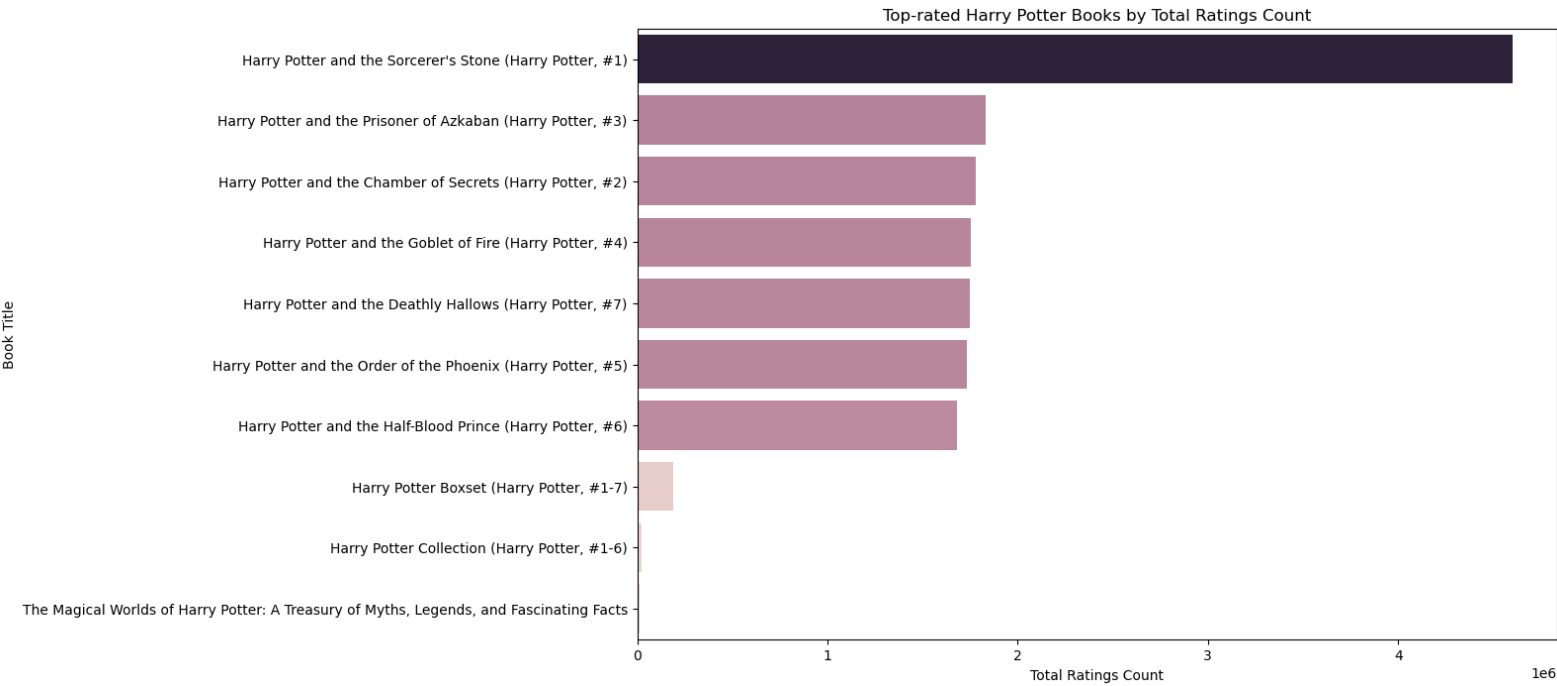
6.

Most Selling Harry Potter Books:

	title	ratings_count
1	Harry Potter and the Sorcerer's Stone (Harry P...	4602479
6	Harry Potter and the Prisoner of Azkaban (Harr...	1832823
9	Harry Potter and the Chamber of Secrets (Harry...	1779331
10	Harry Potter and the Goblet of Fire (Harry Pot...	1753043
11	Harry Potter and the Deathly Hallows (Harry Po...	1746574
8	Harry Potter and the Order of the Phoenix (Har...	1735368
12	Harry Potter and the Half-Blood Prince (Harry ...	1678823
96	Harry Potter Boxset (Harry Potter, #1-7)	190050
613	Harry Potter Collection (Harry Potter, #1-6)	24618
1036	The Magical Worlds of Harry Potter: A Treasury...	13820