

## Подключение библиотек и источников данных, подготовка к анализу

```
In [22]: # импортируем библиотеки
import pandas as pd
from sqlalchemy import create_engine
# устанавливаем параметры
db_config = {'user': 'praktikum_student', # имя пользователя
'pwd': 'Sdf4$2;d-d30pp', # пароль
'host': 'rc1b-wcoijxj3yxfsf3fs.mdb.yandexcloud.net',
'port': 6432, # порт подключения
'db': 'data-analyst-final-project-db'} # название базы данных
connection_string = 'postgresql://{user}:{pwd}@{host}:{port}/{db}'.format(db_config['user'],
db_config['pwd'],
db_config['host'],
db_config['port'],
db_config['db'])
# сохраняем коннектор
engine = create_engine(connection_string, connect_args={'sslmode': 'require'}
```

```
In [23]: pd.io.sql.read_sql('select * from books limit 5', con = engine)
```

```
Out[23]:
```

	book_id	author_id	title	num_pages	publication_date	publisher_id
0	1	546	'Salem's Lot	594	2005-11-01	93
1	2	465	1 000 Places to See Before You Die	992	2003-05-22	336
2	3	407	13 Little Blue Envelopes (Little Blue Envelope...	322	2010-12-21	135
3	4	82	1491: New Revelations of the Americas Before C...	541	2006-10-10	309
4	5	125	1776	386	2006-07-04	268

```
In [24]: pd.io.sql.read_sql('select count(*) from books', con = engine)
```

```
Out[24]:
```

	count
0	1000

```
In [25]: pd.io.sql.read_sql('select * from authors limit 5', con = engine)
```

```
Out[25]:
```

	author_id	author
0	1	A.S. Byatt
1	2	Aesop/Laura Harris/Laura Gibbs
2	3	Agatha Christie
3	4	Alan Brennert
4	5	Alan Moore/David Lloyd

```
In [26]: pd.io.sql.read_sql('select count(*) from authors', con = engine)
```

```
Out[26]:
```

	count
0	636

```
In [27]: pd.io.sql.read_sql('select * from publishers limit 5', con = engine)
```

```
Out[27]:
```

	publisher_id	publisher
0	1	Ace
1	2	Ace Book
2	3	Ace Books
3	4	Ace Hardcover
4	5	Addison Wesley Publishing Company

```
In [28]: pd.io.sql.read_sql('select count(*) from publishers', con = engine)
```

```
Out[28]:
```

	count
0	340

```
In [29]: pd.io.sql.read_sql('select * from ratings limit 5', con = engine)
```

```
Out[29]:
```

	rating_id	book_id	username	rating
0	1	1	ryanfranco	4
1	2	1	grantpatricia	2
2	3	1	brandtandrea	5
3	4	2	lorichen	3
4	5	2	mariokeller	2

```
In [30]: pd.io.sql.read_sql('select count(*) from ratings', con = engine)
```

```
Out[30]:
```

	count
0	6456

```
In [31]: pd.io.sql.read_sql('select * from reviews limit 5', con = engine)
```

```
Out[31]:
```

	review_id	book_id	username	text
0	1	1	brandtandrea	Mention society tell send professor analysis. ...
1	2	1	ryanfranco	Foot glass pretty audience hit themselves. Amo...
2	3	2	lorichen	Listen treat keep worry. Miss husband tax but ...
3	4	3	johnsonamanda	Finally month interesting blue could nature cu...
4	5	3	scotttamara	Nation purpose heavy give wait song will. List...

```
In [32]: pd.io.sql.read_sql('select count(*) from reviews', con = engine)
```

```
Out[32]:
```

	count
0	2793

## Задания

- [x] Посчитайте, сколько книг вышло после 1 января 2000 года;
- [x] Для каждой книги посчитайте количество обзоров и среднюю оценку;
- [x] Определите издательство, которое выпустило наибольшее число книг толще 50 страниц — так вы исключите из анализа брошюры;
- [x] Определите автора с самой высокой средней оценкой книг — учитывайте только книги с 50 и более оценками;
- [x] Посчитайте среднее количество обзоров от пользователей, которые поставили больше 50 оценок.

```
In [33]: pd.io.sql.read_sql('''
select count(*)
from books
where publication_date > DATE '2000-01-01' ''', con = engine)
```

```
Out[33]:
```

	count
0	819

После 1 января 2000 вышло 819 книг

```
In [34]: with pd.option_context('display.max_rows', None, 'display.max_columns', None):
display(pd.io.sql.read_sql('''
    select b.title,
           re.book_id,
           count(*),
           avg(ra.avg_rating)
    from books b
    left join reviews re on b.book_id=re.book_id
    left join (select book_id,
                     avg(rating) avg_rating
    from ratings
    group by book_id) ra on ra.book_id=re.book_id
    group by re.book_id, b.title
''', con = engine))
```

	title	book_id	count	avg
0	Fantastic Beasts and Where to Find Them (Hogwa...	238.0	4	3.888889
1	Lucy Sullivan Is Getting Married	412.0	2	2.500000
2	The Lost Continent: Travels in Small Town America	786.0	2	3.500000
3	Wild Magic (Immortals #1)	981.0	2	4.333333
4	Last Man Standing	385.0	2	3.500000
5	Starship Troopers	595.0	3	4.500000
6	Memoirs of a Geisha	427.0	3	3.700000
7	The Bourne Ultimatum (Jason Bourne #3)	662.0	2	4.000000
8	Body Double (Rizzoli & Isles #4)	120.0	2	4.000000
9	Gulliver's Travels	291.0	3	3.142857
10	The Ultimate Hitchhiker's Guide to the Galaxy ...	892.0	3	4.333333
11	Gravity's Rainbow	289.0	2	3.500000
12	A Bend in the Road	10.0	3	3.200000
13	Shakespeare's Sonnets	560.0	2	4.000000
14	Holes (Holes #1)	320.0	5	3.967742
15	Who's Afraid of Virginia Woolf?	979.0	2	4.500000
16	A Beautiful Mind	9.0	2	4.250000
17	Intensity	354.0	3	3.666667
18	Judge & Jury	368.0	2	3.500000
19	The Calvin and Hobbes Tenth Anniversary Book	669.0	1	3.500000
20	Queen of Babble (Queen of Babble #1)	529.0	3	4.000000
21	The Pilgrim's Progress	825.0	3	3.250000
22	Beauty: A Retelling of the Story of Beauty and...	96.0	3	2.666667
23	A Crown of Swords (The Wheel of Time #7)	16.0	3	4.500000

24	The Pact	818.0	4	3.555556
25	Galápagos	273.0	2	4.500000
26	God Bless You Mr. Rosewater	281.0	2	4.000000
27	Murder on the Orient Express (Hercule Poirot ...	456.0	4	4.333333
28	Neil Gaiman's Neverwhere	469.0	2	5.000000
29	The Woman in White	914.0	4	3.500000
30	A Year in Provence	56.0	2	3.500000
31	The Good Guy	739.0	2	4.000000
32	No Ordinary Time: Franklin and Eleanor Rooseve...	480.0	2	3.500000
33	Howards End	332.0	2	4.000000
34	A Lesson Before Dying	27.0	2	4.500000
35	The Sorrows of Young Werther	873.0	2	4.000000
36	Three Men in a Boat (Three Men #1)	925.0	2	3.000000
37	The Crucible	693.0	4	3.090909
38	My Life in France	458.0	3	3.333333
39	The Beach House	640.0	3	4.000000
40	The Virgin's Lover (The Plantagenet and Tudor ...	899.0	2	3.000000
41	The Corrections	690.0	4	3.200000
42	The Liars' Club	777.0	2	3.500000
43	Cry the Beloved Country	170.0	2	3.500000
44	Chapterhouse: Dune (Dune Chronicles #6)	143.0	2	4.000000
45	Sunshine	603.0	2	4.500000
46	The Wedding (The Notebook #2)	906.0	4	3.400000
47	The Epic of Gilgamesh	716.0	2	3.000000
48	Saturday	551.0	2	3.500000
49	Julie and Julia: 365 Days 524 Recipes 1 Tiny...	369.0	4	3.600000
50	The Power of Myth	832.0	2	4.000000
51	Bloody Bones (Anita Blake Vampire Hunter #5)	115.0	2	3.333333
52	The Millionaire Next Door: The Surprising Secr...	798.0	3	4.000000
53	Odd Thomas (Odd Thomas #1)	484.0	4	3.375000
54	Catherine Called Birdy	140.0	2	3.000000
55	Foundation and Empire (Foundation #2)	261.0	3	3.800000
56	It's Not about the Bike: My Journey Back to Life	359.0	2	4.500000

57	Twelfth Night	944.0	3	3.600000
58	Winter Prey (Lucas Davenport #5)	984.0	1	4.500000
59	Scott Pilgrim Volume 1: Scott Pilgrim's Preci...	554.0	3	4.333333
60	Shutter Island	568.0	4	4.000000
61	The Bonesetter's Daughter	655.0	3	3.500000
62	Kushiel's Avatar (Phèdre's Trilogy #3)	380.0	2	3.000000
63	Notes from Underground White Nights The Drea...	482.0	3	4.333333
64	A History of God: The 4 000-Year Quest of Juda...	25.0	2	4.000000
65	Of Love and Other Demons	487.0	2	4.500000
66	Kitchen Confidential: Adventures in the Culina...	379.0	4	4.142857
67	He's Just Not That Into You: The No-Excuses Tr...	307.0	2	4.000000
68	Marley and Me: Life and Love With the World's ...	420.0	5	3.800000
69	Bloodsucking Fiends (A Love Story #1)	114.0	2	3.500000
70	Alone (Detective D.D. Warren #1)	68.0	2	3.500000
71	Rules of Prey (Lucas Davenport #1)	547.0	3	3.333333
72	The Forever War (The Forever War #1)	728.0	3	4.250000
73	Crucial Conversations: Tools for Talking When ...	169.0	2	5.000000
74	Flags of Our Fathers	249.0	2	4.000000
75	Rachel's Holiday (Walsh Family #2)	531.0	2	3.500000
76	Forever in Blue: The Fourth Summer of the Sist...	257.0	3	3.000000
77	Neither Here nor There: Travels in Europe	470.0	2	2.500000
78	The Shell Seekers	868.0	3	3.666667
79	Little Town on the Prairie (Little House #7)	398.0	2	4.333333
80	The Pearl	820.0	4	3.500000
81	Robinson Crusoe (Robinson Crusoe #1)	544.0	3	4.000000
82	Burnt Offerings (Anita Blake Vampire Hunter #7)	131.0	2	4.333333
83	One Thousand White Women: The Journals of May ...	492.0	4	4.250000
84	The Mad Ship (Livship Traders #2)	789.0	2	4.500000
85	Hard Eight (Stephanie Plum #8)	296.0	3	4.000000
86	Blankets	108.0	3	4.000000
87	Gathering Blue (The Giver #2)	274.0	4	3.800000
88	The Two Towers (The Lord of the Rings #2)	891.0	4	3.952381
89	The Namesake	807.0	4	4.000000
90	A Map of the World	34.0	2	3.666667

91	The Valley of Horses (Earth's Children #2)	896.0	3	4.000000
92	The Source	874.0	2	3.500000
93	Coraline	162.0	5	4.133333
94	Wild at Heart: Discovering the Secret of a Man...	983.0	2	2.500000
95	The Westing Game	908.0	4	3.600000
96	Tarzan of the Apes (Tarzan #1)	614.0	2	4.500000
97	Black Like Me	106.0	2	4.000000
98	Here on Earth	312.0	2	3.500000
99	Four to Score (Stephanie Plum #4)	263.0	3	4.400000
100	The Tombs of Atuan (Earthsea Cycle #2)	886.0	3	4.666667
101	Open House	493.0	2	2.500000
102	The Innovator's Dilemma: The Revolutionary Boo...	762.0	2	3.000000
103	Speaker for the Dead (Ender's Saga #2)	589.0	4	3.571429
104	Charlotte's Web	145.0	5	3.956522
105	Lover Awakened (Black Dagger Brotherhood #3)	409.0	4	4.500000
106	Where Are the Children?	970.0	2	4.000000
107	White Noise	975.0	2	4.000000
108	Oedipus Rex (The Theban Plays #1)	485.0	3	3.000000
109	Hiroshima	315.0	2	4.000000
110	The Odyssey	813.0	4	3.925926
111	The Black Dahlia (L.A. Quartet #1)	646.0	3	4.000000
112	On Beauty	490.0	2	4.500000
113	The God Delusion	735.0	4	4.000000
114	The Clan of the Cave Bear (Earth's Children #1)	676.0	4	4.285714
115	Undaunted Courage: The Pioneering First Missio...	951.0	2	4.000000
116	History of Beauty	318.0	1	2.500000
117	Long Day's Journey into Night	401.0	2	4.000000
118	Interpreter of Maladies	355.0	4	3.200000
119	When the Wind Blows (When the Wind Blows #1)	969.0	2	3.000000
120	A Scanner Darkly	46.0	3	3.666667
121	Morality for Beautiful Girls (No. 1 Ladies' De...	447.0	2	3.500000
122	Year of Wonders	998.0	4	3.200000
123	The Prince of Tides	836.0	3	4.142857
124	Theodore Rex	920.0	2	3.500000

125	The New York Trilogy	809.0	2	3.500000
126	Dear John	184.0	4	3.833333
127	The Idiot	758.0	3	4.250000
128	The 7 Habits of Highly Effective People: Power...	621.0	4	4.000000
129	The Hundred Dresses	756.0	2	4.000000
130	The Heart Is a Lonely Hunter	745.0	3	4.333333
131	Lioness Rampant (Song of the Lioness #4)	393.0	2	4.666667
132	Hell House	310.0	2	3.000000
133	Metamorphoses	434.0	2	4.500000
134	The Runaway Jury	859.0	3	4.555556
135	The Pelican Brief	821.0	3	4.000000
136	The Social Contract	872.0	1	3.500000
137	Lamb: The Gospel According to Biff Christ's C...	382.0	4	4.000000
138	This Present Darkness (Darkness #1)	924.0	3	3.750000
139	Drowning Ruth	202.0	3	2.000000
140	The Poisonwood Bible	830.0	5	4.363636
141	The Power of One (The Power of One #1)	834.0	3	4.333333
142	The Ghost Map: The Story of London's Most Terr...	732.0	2	5.000000
143	Preludes & Nocturnes (The Sandman #1)	524.0	3	4.833333
144	Prodigal Summer	527.0	4	4.000000
145	All the King's Men	66.0	2	4.500000
146	Jane Eyre	364.0	5	4.102041
147	The Dark Half	697.0	2	4.250000
148	Reliquary (Pendergast #2)	542.0	2	4.000000
149	The Friday Night Knitting Club (Friday Night K...	731.0	3	4.000000
150	Color: A Natural History of the Palette	156.0	1	4.333333
151	The Complete Anne of Green Gables Boxed Set (A...	684.0	2	3.500000
152	Blow Fly (Kay Scarpetta #12)	116.0	2	4.000000
153	The Prince	835.0	3	3.714286
154	The Far Pavilions	720.0	2	4.500000
155	The Egypt Game	711.0	2	4.000000
156	Animal Vegetable Miracle: A Year of Food Life	78.0	3	4.000000
157	The Four Loves	730.0	2	4.000000
158	Circle of Friends	151.0	2	4.500000



159	Ivanhoe	360.0	2	3.333333
160	A Painted House	38.0	3	4.000000
161	Naked Lunch	466.0	3	3.333333
162	The Summons	878.0	3	4.333333
163	A Separate Peace	47.0	4	3.285714
164	Little House in the Big Woods (Little House #1)	397.0	3	3.875000
165	The Kitchen God's Wife	772.0	3	2.333333
166	Drums of Autumn (Outlander #4)	203.0	4	4.600000
167	The King of Torts	770.0	3	4.000000
168	Everything's Eventual: 14 Dark Tales	228.0	2	4.000000
169	To Green Angel Tower (Memory Sorrow and Thor...	930.0	1	4.500000
170	Emperor Mage (Immortals #3)	216.0	2	3.500000
171	Sputnik Sweetheart	593.0	3	3.666667
172	My Ántonia (Great Plains Trilogy #3)	462.0	4	4.250000
173	Misery	440.0	4	4.066667
174	The Prophet	839.0	4	4.285714
175	The Elements of Style	713.0	2	4.500000
176	Geek Love	275.0	2	5.000000
177	Alice's Adventures in Wonderland & Through the...	65.0	4	4.000000
178	Leonardo's Notebooks	NaN	1	NaN
179	Anne Rice's The Vampire Lestat: A Graphic Novel	NaN	1	NaN
180	Chronicles: Volume One	150.0	2	4.000000
181	The Unbearable Lightness of Being	893.0	4	3.777778
182	Howl and Other Poems	333.0	2	3.333333
183	Just So Stories	373.0	2	4.000000
184	Watermelon (Walsh Family #1)	964.0	2	3.333333
185	The Bookseller of Kabul	659.0	2	4.000000
186	Endymion (Hyperion Cantos #3)	219.0	2	4.000000
187	The Magicians' Guild (Black Magician Trilogy #1)	790.0	2	3.500000
188	My Name Is Asher Lev	459.0	2	5.000000
189	Inkheart (Inkworld #1)	351.0	4	3.333333
190	Black House (The Talisman #2)	105.0	2	3.500000
191	Plum Island (John Corey #1)	516.0	2	5.000000
192	The Eyre Affair (Thursday Next #1)	717.0	4	4.250000

193	2nd Chance (Women's Murder Club #2)	7.0	3	3.000000
194	The Portrait of a Lady	831.0	3	3.666667
195	Little Women	399.0	5	4.192308
196	Crime and Punishment	166.0	4	3.882353
197	Trickster's Choice (Daughter of the Lioness #1)	937.0	2	3.500000
198	Lord of Chaos (The Wheel of Time #6)	404.0	3	4.500000
199	The Player of Games (Culture #2)	827.0	2	4.500000
200	The Novice (Black Magician Trilogy #2)	812.0	2	4.000000
201	A Quick Bite (Argeneau #1)	43.0	2	4.500000
202	One Day in the Life of Ivan Denisovich	491.0	3	3.666667
203	The Green Mile	741.0	4	4.500000
204	Thunderstruck	929.0	2	2.500000
205	Treasure Island	936.0	4	3.833333
206	Angels & Demons (Robert Langdon #1)	75.0	5	3.678571
207	Boy: Tales of Childhood (Roald Dahl's Autobiog...	123.0	2	4.500000
208	The Cricket in Times Square	692.0	2	3.500000
209	Casino Royale (James Bond #1)	139.0	2	3.000000
210	Eleven on Top (Stephanie Plum #11)	211.0	3	3.750000
211	Death: The High Cost of Living	186.0	1	3.000000
212	Practical Demonkeeping (Pine Cove #1)	522.0	2	4.500000
213	The Catcher in the Rye	673.0	6	3.825581
214	A Hunger Like No Other (Immortals After Dark #1)	26.0	2	4.000000
215	The Castle of Llyr (The Chronicles of Prydain ...	671.0	2	4.000000
216	How the Irish Saved Civilization: The Untold S...	329.0	2	3.500000
217	Truman	941.0	3	4.333333
218	Charlie and the Chocolate Factory (Charlie Buc...	144.0	4	3.950000
219	Sons and Lovers	587.0	2	3.000000
220	The Universe in a Nutshell	895.0	2	4.000000
221	We Were the Mulvaney	966.0	3	3.500000
222	Shopgirl	567.0	2	4.000000
223	A Woman of Substance (Emma Harte Saga #1)	55.0	2	5.000000
224	Hogfather (Discworld #20; Death #4)	319.0	2	3.333333
225	The Audacity of Hope: Thoughts on Reclaiming t...	637.0	4	4.000000

226	Cloudy With a Chance of Meatballs (Cloudy with...	153.0	3	3.400000
227	Blue Moon (Anita Blake Vampire Hunter #8)	118.0	2	3.500000
228	The Queen of the Damned (The Vampire Chronicle...	841.0	3	4.000000
229	Magic Bites (Kate Daniels #1)	415.0	4	4.500000
230	The Jane Austen Book Club	765.0	3	2.666667
231	House of Leaves	327.0	4	4.750000
232	Cujo	172.0	3	3.571429
233	Consider the Lobster and Other Essays	161.0	2	3.000000
234	Where the Heart Is	971.0	3	3.875000
235	Ubik	949.0	3	4.666667
236	Fight Club	247.0	4	4.071429
237	A Game of You (The Sandman #5)	21.0	2	4.500000
238	Peony in Love	502.0	2	4.000000
239	Fables & Reflections (The Sandman #6)	236.0	2	4.500000
240	King Solomon's Mines (Allan Quatermain #1)	376.0	2	3.500000
241	Blink: The Power of Thinking Without Thinking	113.0	5	3.875000
242	Practical Magic (Practical Magic #1)	523.0	2	3.500000
243	Vanity Fair	956.0	3	4.000000
244	True Believer (Jeremy Marsh & Lexie Darnell #1)	940.0	3	4.333333
245	Housekeeping	328.0	2	3.500000
246	Emma	214.0	4	4.150000
247	Notes from a Small Island	483.0	3	3.000000
248	Plain Truth	515.0	4	4.000000
249	The Bachman Books	638.0	1	3.333333
250	The Rainmaker	844.0	2	3.666667
251	The Good Earth (House of Earth #1)	738.0	4	3.571429
252	The Bean Trees (Greer Family #1)	641.0	4	4.400000
253	Witches Abroad (Discworld #12; Witches #3)	987.0	2	4.666667
254	The World Is Flat: A Brief History of the Twen...	915.0	3	2.250000
255	Anne Frank Remembered: The Story of the Woman ...	82.0	2	4.500000
256	The Husband	757.0	2	3.500000
257	Pope Joan	519.0	2	4.000000
258	Dubliners	205.0	3	4.250000
259	Even Cowgirls Get the Blues	223.0	2	3.500000

260	Arrows of the Queen (Heralds of Valdemar #1)	86.0	2	5.000000
261	The Realms of the Gods (Immortals #4)	846.0	2	4.000000
262	The Glass Castle	734.0	6	4.206897
263	Possession	520.0	3	4.000000
264	Faust First Part	244.0	2	4.000000
265	Harry Potter and the Chamber of Secrets (Harry...)	299.0	6	4.287500
266	Goodnight Nobody	287.0	2	3.500000
267	Dead Souls	182.0	2	5.000000
268	Lord of the Flies	405.0	5	3.901408
269	The Iliad	759.0	3	3.818182
270	Raise High the Roof Beam Carpenters & Seymour...	534.0	2	3.500000
271	The Robots of Dawn (Robot #3)	857.0	2	3.500000
272	1491: New Revelations of the Americas Before C...	4.0	2	4.500000
273	Beloved	98.0	4	3.700000
274	By the River Piedra I Sat Down and Wept	132.0	3	3.333333
275	Bitten (Otherworld #1)	101.0	3	3.666667
276	Every Which Way But Dead (The Hollows #3)	225.0	2	4.333333
277	Saving the World and Other Extreme Sports (Max...	552.0	3	2.666667
278	The End of the Affair	715.0	2	3.500000
279	Anna Karenina	81.0	4	3.500000
280	The Plot Against America	828.0	2	3.000000
281	The Fall	719.0	2	4.000000
282	War and Peace	961.0	4	4.375000
283	Think and Grow Rich: The Landmark Bestseller N...	921.0	3	3.000000
284	The Iliad/The Odyssey	760.0	1	4.000000
285	The Hobbit or There and Back Again	750.0	6	4.125000
286	Twilight (Twilight #1)	948.0	7	3.662500
287	Fluke: Or I Know Why the Winged Whale Sings	251.0	2	4.500000
288	Mrs. Piggle-Wiggle (Mrs. Piggle Wiggle #1)	454.0	2	4.500000
289	Dragons of Winter Night (Dragonlance: Chronicl...	196.0	1	4.000000
290	The Invisible Man	763.0	3	3.500000
291	Heretics of Dune (Dune Chronicles #5)	313.0	2	2.500000
292	The Christmas Shoes (Christmas Hope #1)	675.0	2	4.000000

293	Macbeth	414.0	4	3.904762
294	Alice in Wonderland	64.0	4	4.230769
295	The Robber Bride	856.0	2	4.000000
296	From Potter's Field (Kay Scarpetta #6)	268.0	2	4.500000
297	American Gods (American Gods #1)	70.0	5	4.000000
298	The Witching Hour (Lives of the Mayfair Witche...	912.0	3	4.750000
299	Animal Farm	79.0	5	3.729730
300	Mr. Maybe	452.0	2	2.750000
301	Rebecca	539.0	4	4.000000
302	The Mysterious Affair at Styles (Hercule Pairo...	805.0	3	3.857143
303	Gossip Girl (Gossip Girl #1)	288.0	2	2.500000
304	First Things First	248.0	1	4.000000
305	'Salem's Lot	1.0	2	3.666667
306	Insomnia	353.0	3	3.200000
307	Cerulean Sins (Anita Blake Vampire Hunter #11)	142.0	2	3.000000
308	The Penelopiad	822.0	2	2.500000
309	Naked Empire (Sword of Truth #8)	465.0	1	3.500000
310	Prep : A Novel	525.0	2	2.500000
311	The Secret History	864.0	5	3.777778
312	Dead Witch Walking (The Hollows #1)	183.0	3	4.250000
313	The Secret Garden	863.0	4	3.851852
314	The Canterbury Tales	670.0	3	3.333333
315	Burning Chrome (Sprawl #0)	130.0	2	4.500000
316	The Wind in the Willows	909.0	3	3.666667
317	The Secret Life of Bees	865.0	5	3.945946
318	Slaughterhouse-Five	577.0	5	4.028571
319	Last Chance Saloon	384.0	2	4.500000
320	Skinny Dip (Mick Stranahan #2)	573.0	2	3.500000
321	Pale Fire	498.0	2	3.500000
322	The Good the Bad and the Undead (The Hollows...	737.0	2	4.500000
323	The Guardian	742.0	3	4.333333
324	The Call of the Wild	668.0	4	3.500000
325	Lords and Ladies (Discworld #14; Witches #4)	406.0	2	4.500000
326	Merrick (The Vampire Chronicles #7)	431.0	1	4.000000

327	Reading Lolita in Tehran: A Memoir in Books	537.0	4	3.250000
328	Icy Sparks	344.0	2	4.500000
329	The Andromeda Strain (Andromeda #1)	632.0	3	3.625000
330	Disgrace	190.0	3	4.000000
331	Evil Under the Sun (Hercule Poirot #24)	229.0	2	5.000000
332	Homage to Catalonia	321.0	2	5.000000
333	The Partner	819.0	3	3.250000
334	The Black Ice (Harry Bosch #2; Harry Bosch Un...	648.0	2	4.500000
335	The Bluest Eye	649.0	4	4.200000
336	The Natural Way to Draw	NaN	1	NaN
337	You Suck (A Love Story #2)	999.0	2	4.500000
338	Girls in Pants: The Third Summer of the Sister...	279.0	2	4.000000
339	Glass Houses (The Morganville Vampires #1)	280.0	3	4.000000
340	The Lust Lizard of Melancholy Cove (Pine Cove ...	788.0	2	4.000000
341	Extremely Loud and Incredibly Close	232.0	5	3.416667
342	Fooled by Randomness: The Hidden Role of Chanc...	252.0	2	4.000000
343	The Gods Themselves	736.0	2	4.500000
344	Harry Potter and the Order of the Phoenix (Har...	301.0	5	4.186667
345	The Adventures of Huckleberry Finn (Adventures...	623.0	4	3.864865
346	The Silmarillion	870.0	4	3.333333
347	Nineteen Minutes	478.0	5	4.000000
348	The Last Juror	774.0	3	4.333333
349	Farmer Boy (Little House #2)	241.0	2	4.500000
350	Black Hole	104.0	2	4.500000
351	Kiss the Girls (Alex Cross #2)	378.0	3	3.727273
352	Pet Sematary	506.0	3	3.777778
353	Chronicle of a Death Foretold	149.0	3	4.666667
354	Tales of a Fourth Grade Nothing (Fudge #1)	611.0	3	4.000000
355	The Crying of Lot 49	694.0	2	3.000000
356	Mother Night	449.0	3	4.333333
357	Truth and Beauty	942.0	2	4.500000
358	Ham on Rye	293.0	3	4.000000
359	Light in August	390.0	2	5.000000
360	Diary	188.0	3	3.000000

361	Fables Vol. 1: Legends in Exile	234.0	3	3.800000
362	The Alchemist	627.0	6	3.789474
363	Gerald's Game	276.0	3	4.000000
364	The Walking Dead Book One (The Walking Dead #...	901.0	2	5.000000
365	Goodnight Moon	286.0	4	4.300000
366	Piercing the Darkness (Darkness #2)	513.0	2	5.000000
367	Their Eyes Were Watching God	919.0	4	4.125000
368	Maus I: A Survivor's Tale: My Father Bleeds Hi...	423.0	4	4.500000
369	South of the Border West of the Sun	588.0	3	3.000000
370	The Devil in the White City: Murder Magic an...	702.0	5	3.733333
371	King Lear	375.0	3	4.333333
372	A Million Little Pieces	35.0	4	3.750000
373	The Client	677.0	3	4.076923
374	The History of Love	749.0	4	3.500000
375	For a Few Demons More (The Hollows #5)	254.0	2	4.500000
376	Wyrd Sisters (Discworld #6; Witches #2)	996.0	3	3.666667
377	The High Lord (Black Magician Trilogy #3)	747.0	2	2.500000
378	Dead Beat (The Dresden Files #7)	181.0	3	4.000000
379	Essential Tales and Poems	NaN	1	NaN
380	The Screwtape Letters	861.0	4	4.200000
381	The Once and Future King (The Once and Future ...	815.0	3	4.666667
382	An Ideal Husband	73.0	2	4.000000
383	Mythology	464.0	2	4.000000
384	I'm a Stranger Here Myself: Notes on Returning...	343.0	2	3.000000
385	Stranger in a Strange Land	600.0	4	4.111111
386	The Midwife's Apprentice	796.0	2	4.000000
387	The Botany of Desire: A Plant's-Eye View of th...	660.0	2	3.500000
388	Guilty Pleasures (Anita Blake Vampire Hunter ...	290.0	3	3.600000
389	Pygmalion	528.0	3	4.000000
390	Emotional Intelligence: Why It Can Matter More...	215.0	3	4.333333
391	The Broker	664.0	3	4.000000
392	Dry	204.0	3	4.333333
393	The House of Mirth	754.0	3	4.000000

394	The Fellowship of the Ring (The Lord of the Ri...	722.0	5	4.391892
395	Wizard's First Rule (Sword of Truth #1)	990.0	4	4.000000
396	Aesop's Fables	58.0	2	3.750000
397	The Mill on the Floss	797.0	2	3.000000
398	Ranma ½ Vol. 1 (Ranma ½ (US 2nd) #1)	535.0	1	4.000000
399	Hawaii	306.0	2	4.333333
400	The Five People You Meet in Heaven	727.0	5	3.526316
401	The Vampire Lestat (The Vampire Chronicles #2)	898.0	3	4.166667
402	The Sinner (Rizzoli & Isles #3)	871.0	2	4.500000
403	Brideshead Revisited	126.0	3	3.666667
404	My Father's Dragon (My Father's Dragon #1)	457.0	2	4.000000
405	The Moon is a Harsh Mistress	802.0	3	3.750000
406	Getting Things Done: The Art of Stress-Free Pr...	277.0	3	3.750000
407	The Scarlet Letter	860.0	4	3.227273
408	The Body	650.0	2	4.500000
409	Evening Class	224.0	2	5.000000
410	Cryptonomicon	171.0	3	4.333333
411	The Return of the Native	850.0	2	4.000000
412	The Rise of Endymion (Hyperion Cantos #4)	852.0	2	4.000000
413	The Rise of Theodore Roosevelt	853.0	2	4.500000
414	Death Note Vol. 1: Boredom (Death Note #1)	185.0	3	3.714286
415	Lisey's Story	395.0	3	3.333333
416	The Fires of Heaven (The Wheel of Time #5)	724.0	3	3.500000
417	Seven Up (Stephanie Plum #7)	557.0	3	2.750000
418	The Laughing Corpse (Anita Blake Vampire Hunt...	776.0	2	4.666667
419	Hatchet (Brian's Saga #1)	304.0	5	4.200000
420	Labyrinth (Languedoc #1)	381.0	2	4.500000
421	The 6th Target (Women's Murder Club #6)	620.0	2	3.500000
422	Fast Food Nation: The Dark Side of the All-Ame...	242.0	4	3.285714
423	Memoirs of a Geisha	426.0	5	4.195652
424	The Book of Three (The Chronicles of Prydain #1)	658.0	3	3.666667
425	Disney's Beauty and the Beast (A Little Golden...	NaN	1	NaN
426	Of Human Bondage	486.0	2	4.000000



427	Small Gods (Discworld #13)	578.0	3	4.000000
428	Terrier (Beka Cooper #1)	618.0	2	3.000000
429	The Guns of August	743.0	2	4.500000
430	Interview with the Vampire (The Vampire Chroni...	356.0	4	4.125000
431	Bitter Is the New Black: Confessions of a Cond...	102.0	2	3.500000
432	The Devil and Miss Prym (On the Seventh Day #3)	701.0	2	3.500000
433	Harry Potter Boxed Set Books 1-5 (Harry Potte...	298.0	1	4.500000
434	How to Stop Worrying and Start Living	331.0	3	4.333333
435	The Adventures of Tom Sawyer and Adventures of...	625.0	1	5.000000
436	Song of Solomon	586.0	3	3.666667
437	Wherever You Go There You Are: Mindfulness Me...	972.0	2	5.000000
438	Act of Treason (Mitch Rapp #9)	57.0	2	5.000000
439	Special Topics in Calamity Physics	590.0	2	4.000000
440	The Deep End of the Ocean (Cappadora Family #1)	698.0	2	3.250000
441	Jack & Jill (Alex Cross #3)	362.0	2	3.333333
442	Confessions of a Shopaholic (Shopaholic #1)	158.0	4	3.857143
443	Fantastic Mr. Fox	239.0	3	3.666667
444	1 000 Places to See Before You Die	2.0	1	2.500000
445	Phantoms	511.0	2	4.333333
446	The Waste Land	904.0	2	3.500000
447	The Notebook (The Notebook #1)	811.0	5	3.868421
448	Fall on Your Knees	237.0	2	4.500000
449	The Jungle	767.0	3	3.750000
450	A Short History of Nearly Everything	48.0	4	4.000000
451	A Brief History of Time	12.0	4	4.000000
452	Tell No One	616.0	3	4.500000
453	Murder at the Vicarage (Miss Marple #1)	455.0	3	4.400000
454	Silent Spring	570.0	2	3.000000
455	A Dirty Job (Grim Reaper #1)	17.0	4	5.000000
456	Matilda	422.0	4	4.421053
457	Moloka'i (Moloka'i #1)	443.0	4	3.000000
458	The Divine Comedy	705.0	3	3.750000
459	The Jungle Books	768.0	2	3.666667

460	Dreamland	201.0	3	4.333333
461	Lasher (Lives of the Mayfair Witches #2)	383.0	2	4.500000
462	The Wake (The Sandman #10)	900.0	2	4.500000
463	A Streetcar Named Desire	49.0	3	3.666667
464	Nine Stories	477.0	3	4.000000
465	The Sea of Monsters (Percy Jackson and the Oly...	862.0	5	4.272727
466	Amsterdam	72.0	2	2.500000
467	A Wild Sheep Chase (The Rat #3)	54.0	3	4.000000
468	The Lunatic Cafe (Anita Blake Vampire Hunter #4)	787.0	2	3.333333
469	The Bad Place	639.0	1	3.500000
470	The Harlequin (Anita Blake Vampire Hunter #15)	744.0	2	3.000000
471	Snow Flower and the Secret Fan	581.0	5	4.636364
472	Walden	960.0	3	3.400000
473	Forever Odd (Odd Thomas #2)	256.0	3	4.333333
474	Shadow of the Hegemon (The Shadow Series #2)	559.0	2	3.666667
475	James and the Giant Peach	363.0	4	4.250000
476	Built to Last: Successful Habits of Visionary ...	129.0	1	4.500000
477	Dark Lover (Black Dagger Brotherhood #1)	177.0	4	4.100000
478	Congo	160.0	2	3.666667
479	The Brethren	663.0	2	4.000000
480	The Last of the Mohicans (The Leatherstocking ...	775.0	3	4.000000
481	Misty of Chincoteague (Misty #1)	441.0	2	5.000000
482	Vanish (Rizzoli & Isles #5)	954.0	2	3.000000
483	Without Remorse (John Clark #1; Jack Ryan Uni...	989.0	2	4.500000
484	Cross (Alex Cross #12)	167.0	2	4.000000
485	The Communist Manifesto	683.0	3	4.000000
486	The Waste Lands (The Dark Tower #3)	905.0	3	4.000000
487	The Five Dysfunctions of a Team: A Leadership ...	726.0	3	4.333333
488	Zen and the Art of Motorcycle Maintenance: An ...	1000.0	4	3.833333
489	Executive Orders (Jack Ryan #8)	230.0	1	3.500000
490	The Amazing Adventures of Kavalier & Clay	629.0	4	4.666667
491	A Breath of Snow and Ashes (Outlander #6)	11.0	3	4.250000
492	Captivating: Unveiling the Mystery of a Woman'...	136.0	2	5.000000
493	Brave New World / Brave New World Revisited	125.0	2	3.600000

494	A Room of One's Own	44.0	3	4.000000
495	Thinner	922.0	2	3.666667
496	Salt: A World History	550.0	2	4.000000
497	Blue Ocean Strategy: How to Create Uncontested...	119.0	2	3.500000
498	The Oedipus Cycle: Oedipus Rex Oedipus at Col...	814.0	2	4.000000
499	The Dispossessed	704.0	3	4.666667
500	War and Remembrance (The Henry Family #2)	962.0	2	4.500000
501	Suzanne's Diary for Nicholas	607.0	3	4.600000
502	The Philosophy of Andy Warhol (From A to B and...	823.0	1	4.500000
503	The Big Bad Wolf (Alex Cross #9)	642.0	2	5.000000
504	Native Son	468.0	3	4.666667
505	Taran Wanderer (The Chronicles of Prydain #4)	613.0	2	4.500000
506	My Sister's Keeper	461.0	5	4.142857
507	Wild Swans: Three Daughters of China	982.0	3	4.000000
508	Lipstick Jungle	394.0	2	3.000000
509	Longitude: The True Story of a Lone Genius Who...	402.0	2	3.000000
510	Shopaholic & Baby (Shopaholic #5)	563.0	3	3.000000
511	Velocity	957.0	2	3.500000
512	Dragonsong (Harper Hall #1)	198.0	2	4.500000
513	Good in Bed (Cannie Shapiro #1)	285.0	4	3.600000
514	Cold Mountain	154.0	4	3.625000
515	The Moonstone	803.0	3	4.000000
516	The Collectors (Camel Club #2)	679.0	2	4.000000
517	Who Moved My Cheese?	978.0	4	4.000000
518	The Richest Man in Babylon	851.0	3	3.333333
519	The Firm	725.0	3	4.052632
520	American Pastoral (The American Trilogy #1)	71.0	2	3.500000
521	The Terror	882.0	2	4.500000
522	The Color of Water: A Black Man's Tribute to H...	682.0	4	4.250000
523	The Fountainhead	729.0	4	3.700000
524	The Hound of the Baskervilles	753.0	4	4.000000
525	Bleak House	110.0	3	3.333333
526	World War Z: An Oral History of the Zombie War	994.0	5	3.769231
527	The Red Tent	847.0	5	3.411765

528	Ella Enchanted (Ella Enchanted #1)	212.0	4	4.076923
529	Life the Universe and Everything (Hitchhiker'...	389.0	3	4.000000
530	Anthem	85.0	4	3.250000
531	The Quiet American	843.0	2	4.500000
532	Pop Goes the Weasel (Alex Cross #5)	518.0	2	5.000000
533	Eat Pray Love	207.0	6	3.395833
534	The Known World	773.0	2	4.000000
535	Beach Music	95.0	2	4.000000
536	The Yiddish Policemen's Union	917.0	2	4.500000
537	1776	5.0	4	4.000000
538	The Art of Happiness	634.0	3	3.333333
539	The Miraculous Journey of Edward Tulane	799.0	3	4.000000
540	Xenocide (Ender's Saga #3)	997.0	3	3.400000
541	Man's Search for Meaning	417.0	5	4.000000
542	Shopaholic Ties the Knot (Shopaholic #3)	565.0	3	4.500000
543	Message in a Bottle	432.0	3	4.142857
544	The Curious Incident of the Dog in the Night-Time	695.0	6	4.081081
545	The Giver (The Giver #1)	733.0	6	3.750000
546	The High King (The Chronicles of Prydain #5)	746.0	2	4.500000
547	The Pilot's Wife	826.0	3	3.333333
548	What Is the What	968.0	3	3.333333
549	The Undomestic Goddess	894.0	4	4.222222
550	The Lost Boy (Dave Pelzer #2)	785.0	2	4.000000
551	Atlas Shrugged	90.0	5	3.583333
552	The Republic	848.0	3	3.800000
553	Everyday Italian: 125 Simple and Delicious Rec...	226.0	1	3.500000
554	Mercy	429.0	2	3.500000
555	Black and Blue	107.0	2	3.333333
556	I Capture the Castle	339.0	3	4.666667
557	Dr. Faustus	193.0	2	2.500000
558	Othello	495.0	3	3.300000
559	Different Seasons	189.0	3	3.200000
560	Flowers for Algernon	250.0	4	4.166667

561	Journey to the Center of the Earth (Extraordin...	367.0	3	3.500000
562	The Door to December	707.0	2	4.500000
563	A Room with a View	45.0	3	3.800000
564	Something Blue (Darcy & Rachel #2)	583.0	4	4.142857
565	The Complete Calvin and Hobbes	685.0	2	4.500000
566	Paradise Lost	500.0	3	3.750000
567	Blindness	111.0	4	3.750000
568	Swan Song	608.0	2	4.000000
569	Mayflower: A Story of Courage Community and War	424.0	2	4.500000
570	The Trial	887.0	3	3.833333
571	The Queen of Attolia (The Queen's Thief #2)	840.0	2	4.000000
572	Mrs. Dalloway	453.0	4	3.714286
573	Children of the Mind (Ender's Saga #4)	146.0	3	4.666667
574	A Portrait of the Artist as a Young Man	41.0	3	4.250000
575	Dark Prince (Dark #1)	178.0	2	3.000000
576	Jurassic Park (Jurassic Park #1)	372.0	3	3.812500
577	The Princess Bride	837.0	5	4.160000
578	Triptych (Will Trent #1)	938.0	2	5.000000
579	A Tree Grows in Brooklyn	51.0	5	4.250000
580	The Long Walk	781.0	4	4.000000
581	The 48 Laws of Power	619.0	3	4.333333
582	Men Are from Mars Women Are from Venus	428.0	3	4.200000
583	Less Than Zero	388.0	2	3.500000
584	Specials (Uglies #3)	591.0	4	4.166667
585	Collapse: How Societies Choose to Fail or Succeed	155.0	2	3.000000
586	The Hotel New Hampshire	752.0	2	4.500000
587	Black Beauty	103.0	3	4.125000
588	The Stranger Beside Me: Ted Bundy: The Shockin...	876.0	2	3.000000
589	Dragonfly in Amber (Outlander #2)	195.0	4	4.875000
590	Horton Hears a Who!	325.0	2	3.500000
591	Peter Pan	507.0	4	4.000000
592	Eight Cousins (Eight Cousins #1)	209.0	2	4.500000
593	Baby Proof	91.0	3	3.600000
594	Anne of Green Gables (Anne of Green Gables #1)	84.0	5	4.000000

595	Hannibal (Hannibal Lecter #3)	295.0	3	3.333333
596	Alanna: The First Adventure (Song of the Lione...	61.0	3	4.000000
597	The Year of Magical Thinking	916.0	4	3.400000
598	Outlander (Outlander #1)	497.0	6	4.125000
599	Orlando	494.0	2	3.500000
600	Moneyball: The Art of Winning an Unfair Game	444.0	3	5.000000
601	The Innocent Man: Murder and Injustice in a Sm...	761.0	2	4.500000
602	4th of July (Women's Murder Club #4)	8.0	3	4.000000
603	Of Mice and Men	488.0	5	3.622951
604	The Alienist (Dr. Laszlo Kreizler #1)	628.0	4	4.400000
605	A Murder Is Announced (Miss Marple #5)	37.0	2	4.000000
606	Three Weeks With My Brother	926.0	2	4.500000
607	Cause of Death (Kay Scarpetta #7)	141.0	2	3.500000
608	Moll Flanders	442.0	2	4.000000
609	In the Heart of the Sea: The Tragedy of the Wh...	348.0	3	3.333333
610	The Mermaid Chair	794.0	3	2.333333
611	Voyager (Outlander #3)	959.0	4	4.285714
612	Shopaholic Takes Manhattan (Shopaholic #2)	564.0	3	3.000000
613	On Basilisk Station (Honor Harrington #1)	489.0	2	4.000000
614	Meditations	425.0	3	3.000000
615	The Metamorphosis and Other Stories	795.0	2	3.500000
616	Persuasion	505.0	4	4.250000
617	Chocolate Chip Cookie Murder (Hannah Swensen #1)	147.0	2	4.000000
618	A Walk to Remember	53.0	4	3.900000
619	Tai-Pan (Asian Saga #2)	610.0	2	5.000000
620	The Body in the Library (Miss Marple #3)	652.0	2	4.500000
621	The Kissing Hand	771.0	3	4.000000
622	Dracula	194.0	5	3.296296
623	Left Behind (Left Behind #1)	386.0	3	4.000000
624	Equal Rites (Discworld #3; Witches #1)	220.0	3	4.250000
625	Never Let Me Go	471.0	5	3.928571
626	A Fistful of Charms (The Hollows #4)	20.0	2	5.000000
627	Furies of Calderon (Codex Alera #1)	272.0	3	2.666667
628	A Man Without a Country	33.0	2	4.000000

629	Twenty Love Poems and a Song of Despair	946.0	2	4.500000
630	Wolves of the Calla (The Dark Tower #5)	992.0	3	3.600000
631	Rage of Angels	532.0	2	4.500000
632	The Road	854.0	6	3.772727
633	His Excellency: George Washington	316.0	2	2.000000
634	I Am Legend	337.0	2	3.500000
635	The Princess Diaries (The Princess Diaries #1)	838.0	3	3.875000
636	Sula	602.0	2	3.500000
637	The Body Farm (Kay Scarpetta #5)	651.0	2	4.000000
638	After Dark	59.0	3	4.333333
639	Foundation and Earth (Foundation #5)	260.0	2	4.500000
640	Junky	371.0	2	2.000000
641	A Christmas Carol and Other Christmas Writings	14.0	1	4.500000
642	The Color Purple	680.0	4	4.250000
643	Everyone Worth Knowing	227.0	3	3.333333
644	I Feel Bad About My Neck: And Other Thoughts o...	340.0	2	4.000000
645	The Drawing of the Three (The Dark Tower #2)	710.0	4	4.285714
646	The Truth (Discworld #25; Industrial Revoluti...	889.0	2	3.500000
647	The Complete Maus	686.0	4	4.000000
648	Far From the Madding Crowd	240.0	3	4.250000
649	Moo Baa La La La!	446.0	1	3.000000
650	Band of Brothers: E Company 506th Regiment 1...	93.0	3	4.000000
651	Bookends	121.0	2	3.000000
652	The Power of Now: A Guide to Spiritual Enlight...	833.0	4	3.500000
653	Ten Apples Up On Top!	617.0	1	4.000000
654	Beyond Good and Evil	99.0	2	4.000000
655	Hamlet	294.0	4	3.909091
656	The Light Fantastic (Discworld #2; Rincewind #2)	778.0	3	3.750000
657	Second Foundation (Foundation #3)	556.0	3	4.000000
658	Persepolis 2: The Story of a Return (Persepoli...	503.0	2	3.500000
659	The Constant Princess (The Plantagenet and Tud...	689.0	3	3.800000
660	The Memory Keeper's Daughter	793.0	5	3.263158
661	The Murder of Roger Ackroyd (Hercule Poirot #4)	804.0	4	4.000000

662	Throne of Jade (Temeraire #2)	928.0	2	3.000000
663	Son of a Witch (The Wicked Years #2)	585.0	2	3.000000
664	13 Little Blue Envelopes (Little Blue Envelope...)	3.0	3	4.666667
665	Half of a Yellow Sun	292.0	3	3.333333
666	A Light in the Attic	28.0	3	4.076923
667	Influence: The Psychology of Persuasion	350.0	3	4.333333
668	A Little Princess	29.0	4	3.888889
669	Love in the Time of Cholera	408.0	5	4.083333
670	Brave New World	124.0	5	4.000000
671	The Tipping Point: How Little Things Can Make ...	885.0	5	3.818182
672	The Doll's House (The Sandman #2)	706.0	2	4.000000
673	The Black Cauldron (The Chronicles of Prydain ...)	645.0	2	4.500000
674	Lover Eternal (Black Dagger Brotherhood #2)	410.0	4	3.833333
675	White Oleander	976.0	4	3.363636
676	Horton Hatches the Egg	324.0	2	3.000000
677	Winter's Heart (The Wheel of Time #9)	985.0	2	4.000000
678	A Clash of Kings (A Song of Ice and Fire #2)	15.0	5	4.391304
679	Illusions: The Adventures of a Reluctant Messiah	345.0	2	4.500000
680	White Fang	974.0	3	4.200000
681	Danny the Champion of the World	176.0	2	4.000000
682	Reaper Man (Discworld #11; Death #2)	538.0	2	3.666667
683	Cursor's Fury (Codex Alera #3)	173.0	2	4.500000
684	The Woman in Black	913.0	2	5.000000
685	Dune Messiah (Dune Chronicles #2)	206.0	3	4.000000
686	The Joy Luck Club	766.0	4	3.900000
687	Trainspotting	933.0	2	4.333333
688	I Like You: Hospitality Under the Influence	342.0	2	3.500000
689	The Farthest Shore (Earthsea Cycle #3)	721.0	2	3.666667
690	Can You Keep a Secret?	133.0	4	4.083333
691	Little Dorrit	396.0	2	3.500000
692	Skippling Christmas	575.0	2	3.000000
693	Travels with Charley: In Search of America	935.0	2	4.500000
694	God Emperor of Dune (Dune Chronicles #4)	282.0	2	4.500000



695	The Brothers Karamazov	665.0	4	3.428571
696	Salem Falls	549.0	3	4.333333
697	Marked (House of Night #1)	419.0	5	3.571429
698	Bright Lights Big Ass	127.0	2	4.000000
699	And Then There Were None	74.0	5	4.454545
700	The Winds of War (The Henry Family #1)	910.0	2	4.500000
701	Lost in a Good Book (Thursday Next #2)	407.0	2	4.500000
702	Fables Vol. 3: Storybook Love	235.0	2	4.500000
703	Eugene Onegin	222.0	2	3.500000
704	Surely You're Joking Mr. Feynman!: Adventures...	604.0	3	4.250000
705	Harry Potter and the Half-Blood Prince (Harry ...	300.0	5	4.246575
706	The Amazing Maurice and His Educated Rodents (...)	630.0	2	4.500000
707	How to Be a Domestic Goddess: Baking and the A...	330.0	1	5.000000
708	The Vampire Armand (The Vampire Chronicles #6)	897.0	2	4.000000
709	Ender's Shadow (The Shadow Series #1)	217.0	3	4.200000
710	The Adventures of Tom Sawyer (Adventures of To...	624.0	4	3.958333
711	Still Life with Woodpecker	597.0	3	4.000000
712	Women	993.0	2	5.000000
713	Stardust	594.0	4	4.000000
714	Spook: Science Tackles the Afterlife	592.0	2	3.000000
715	Strangers	601.0	2	4.000000
716	Franny and Zooey	265.0	4	4.166667
717	Babyville	92.0	1	3.500000
718	The Lorax	784.0	3	4.300000
719	A Caress of Twilight (Merry Gentry #2)	13.0	2	3.000000
720	The Long Dark Tea-Time of the Soul (Dirk Gentl...	780.0	2	4.000000
721	Harvesting the Heart	303.0	2	1.500000
722	From a Buick 8	269.0	2	4.500000
723	Traveling Mercies: Some Thoughts on Faith	934.0	2	4.000000
724	The Big Sleep (Philip Marlowe #1)	643.0	3	4.250000
725	I Hope They Serve Beer in Hell (Tucker Max #1)	341.0	2	3.500000
726	A Moveable Feast	36.0	3	4.666667
727	Survival in Auschwitz	605.0	2	3.000000
728	Vanishing Acts	955.0	3	3.750000

729	The Thirteenth Tale	884.0	5	4.444444
730	The Mysterious Island (Extraordinary Voyages ...	806.0	2	4.500000
731	Hoot	323.0	3	3.333333
732	Blue Like Jazz: Nonreligious Thoughts on Chris...	117.0	3	3.500000
733	Cyrano de Bergerac	174.0	2	4.000000
734	Stone of Farewell (Memory Sorrow and Thorn #2)	599.0	1	5.000000
735	Count Zero (Sprawl #2)	164.0	2	2.500000
736	Boy Meets Boy	122.0	3	4.666667
737	A Drink Before the War (Kenzie & Gennaro #1)	18.0	2	4.000000
738	Carpe Jugulum (Discworld #23; Witches #6)	137.0	2	4.000000
739	Peter and the Shadow Thieves (Peter and the St...	508.0	2	4.000000
740	A Long Way Down	30.0	3	3.000000
741	Crossing to Safety	168.0	2	3.500000
742	The Complete Stories and Poems	688.0	2	4.285714
743	Christine	148.0	3	3.428571
744	Patriot Games (Jack Ryan #1)	501.0	2	4.166667
745	Pippi Longstocking	514.0	3	3.666667
746	Peter and the Starcatchers (Peter and the Star...	509.0	3	4.333333
747	Shopaholic and Sister (Shopaholic #4)	566.0	3	3.666667
748	Founding Brothers: The Revolutionary Generation	262.0	2	4.500000
749	The Demon-Haunted World: Science as a Candle i...	699.0	2	5.000000
750	Into Thin Air: A Personal Account of the Mount...	357.0	4	3.769231
751	Gone for Good	283.0	2	4.500000
752	The Black Echo (Harry Bosch #1; Harry Bosch U...	647.0	3	4.200000
753	Twelve Sharp (Stephanie Plum #12)	945.0	3	4.333333
754	The Angel Experiment (Maximum Ride #1)	633.0	4	4.142857
755	A People's History of the United States	40.0	4	4.000000
756	The Looking Glass Wars	783.0	2	4.000000
757	Julius Caesar	370.0	3	3.000000
758	The Color of Magic (Discworld #1; Rincewind #1)	681.0	4	4.111111
759	Dreamcatcher	200.0	3	2.800000
760	Veronika Decides to Die	958.0	4	3.400000
761	Pretties (Uglies #2)	526.0	4	4.125000
762	Mere Christianity	430.0	4	4.000000

763	Angels Flight (Harry Bosch #6; Harry Bosch Un...	77.0	2	4.500000
764	The War of the Worlds	903.0	4	3.000000
765	Skeleton Crew	572.0	2	3.250000
766	The Histories	748.0	2	3.500000
767	Tsubasa: RESERVoIR CHRoNiCLE Vol. 1	943.0	1	2.500000
768	John Adams	366.0	4	3.800000
769	Emily of New Moon (Emily #1)	213.0	2	5.000000
770	Cane River	134.0	2	4.500000
771	Bel Canto	97.0	5	3.375000
772	Plum Lovin' (Stephanie Plum #12.5)	517.0	2	4.000000
773	The Poet (Jack McEvoy #1; Harry Bosch Univers...	829.0	3	3.333333
774	So Long and Thanks for All the Fish (Hitchhik...	582.0	2	4.250000
775	Confessions of an Ugly Stepsister	159.0	2	4.500000
776	A Passage to India	39.0	2	3.500000
777	Water for Elephants	963.0	6	3.977273
778	I Robot (Robot #0.1)	336.0	3	3.777778
779	The Shadow Rising (The Wheel of Time #4)	867.0	3	3.666667
780	Ahab's Wife or The Star-Gazer	60.0	2	4.000000
781	The Dragon Reborn (The Wheel of Time #3)	709.0	3	4.142857
782	The Bourne Identity (Jason Bourne #1)	661.0	3	4.076923
783	Bleach Volume 01	109.0	2	4.000000
784	Team of Rivals: The Political Genius of Abraha...	615.0	4	3.800000
785	Daughter of Fortune	180.0	3	3.250000
786	The Face on the Milk Carton (Janie Johnson #1)	718.0	2	3.500000
787	The Art of War	636.0	4	4.111111
788	Rant	536.0	2	4.500000
789	Phantom (Sword of Truth #10)	510.0	1	3.500000
790	Gone with the Wind	284.0	5	4.428571
791	Survivor	606.0	2	3.500000
792	1st to Die (Women's Murder Club #1)	6.0	4	3.500000
793	V for Vendetta	953.0	3	4.222222
794	Fun Home: A Family Tragicomic	271.0	2	4.000000
795	Hard Times	297.0	2	5.000000

796	Ship of Destiny (Liveship Traders #3)	562.0	2	4.500000
797	My Side of the Mountain (Mountain #1)	460.0	2	3.500000
798	The Winter of Our Discontent	911.0	2	2.500000
799	A Walk in the Woods: Rediscovering America on ...	52.0	5	3.636364
800	Magician: Apprentice (The Riftwar Saga #1)	416.0	2	3.666667
801	Micah (Anita Blake Vampire Hunter #13)	436.0	2	3.500000
802	The Trumpet of the Swan	888.0	3	3.000000
803	The Twits	890.0	3	4.750000
804	Alexander Hamilton	63.0	4	4.000000
805	Rainbow Six (John Clark #2; Jack Ryan Univers...	533.0	2	3.500000
806	Something Borrowed (Darcy & Rachel #1)	584.0	4	3.687500
807	As You Like It	87.0	2	4.333333
808	Persepolis: The Story of a Childhood (Persepol...	504.0	4	4.333333
809	Lightning	391.0	2	4.500000
810	Wicked: The Grimmerie	980.0	1	3.500000
811	Romeo and Juliet	545.0	5	3.787879
812	Midnight's Children	439.0	4	3.000000
813	Marvel 1602	421.0	2	5.000000
814	Freak the Mighty (Freak The Mighty #1)	266.0	2	4.000000
815	Fullmetal Alchemist Vol. 1 (Fullmetal Alchemi...	270.0	2	4.250000
816	Smoke and Mirrors: Short Fiction and Illusions	579.0	2	4.000000
817	Inkspell (Inkworld #2)	352.0	3	3.500000
818	The End of Faith: Religion Terror and the Fu...	714.0	2	3.500000
819	Utopia	952.0	2	3.000000
820	Assassin's Quest (Farseer Trilogy #3)	88.0	3	3.666667
821	Kingdom Come	377.0	2	4.500000
822	The A.B.C. Murders (Hercule Poirot #13)	622.0	3	3.666667
823	White Teeth	977.0	4	3.750000
824	The Boleyn Inheritance (The Plantagenet and Tu...	653.0	3	3.000000
825	Henry V	311.0	2	3.500000
826	Freakonomics: A Rogue Economist Explores the H...	267.0	5	3.909091
827	The Tenth Circle	881.0	4	3.500000
828	Mystic River	463.0	3	4.250000
829	The Fiery Cross (Outlander #5)	723.0	4	4.200000

830	The Well of Lost Plots (Thursday Next #3)	907.0	2	3.500000
831	Redwall (Redwall #1)	541.0	3	4.250000
832	Like Water for Chocolate	392.0	4	3.600000
833	The Count of Monte Cristo	691.0	5	4.217391
834	Mountains Beyond Mountains: The Quest of Dr. P...	450.0	3	4.333333
835	A Hat Full of Sky (Discworld #32; Tiffany Ach...	23.0	2	4.000000
836	Sahara (Dirk Pitt #11)	548.0	2	3.500000
837	Next	473.0	3	4.333333
838	March	418.0	2	5.000000
839	The Closers (Harry Bosch #11; Harry Bosch Uni...	678.0	2	4.500000
840	A Fine Balance	19.0	4	4.000000
841	The Island of Doctor Moreau	764.0	3	4.000000
842	Batman: Arkham Asylum - A Serious House on Ser...	94.0	2	3.500000
843	Einstein: His Life and Universe	210.0	3	3.250000
844	The Book of Ruth	657.0	2	4.000000
845	Alas Babylon	62.0	2	5.000000
846	I Claudius (Claudius #1)	335.0	2	4.000000
847	Darkest Hour (The Mediator #4)	179.0	2	4.500000
848	Wolf-Speaker (Immortals #2)	991.0	2	4.000000
849	Incubus Dreams (Anita Blake Vampire Hunter #12)	349.0	2	4.000000
850	A Long Way from Chicago (A Long Way from Chica...	32.0	2	3.500000
851	The Monster at the End of this Book	801.0	3	4.750000
852	The Picture of Dorian Gray	824.0	5	4.000000
853	Jitterbug Perfume	365.0	2	4.000000
854	While I Was Gone	973.0	2	4.000000
855	Nowhere (London Below #1)	472.0	5	4.083333
856	Red Dragon (Hannibal Lecter #1)	540.0	3	4.222222
857	Harry Potter and the Prisoner of Azkaban (Harr...	302.0	6	4.414634
858	The Origin of Species	816.0	2	3.333333
859	A Heartbreaking Work of Staggering Genius	24.0	4	4.166667
860	The Great Divorce	740.0	3	4.500000
861	Nick & Norah's Infinite Playlist	474.0	3	3.666667
862	The Testament	883.0	3	4.000000

863	The Diamond Age: Or A Young Lady's Illustrate...	703.0	3	4.333333
864	Way of the Peaceful Warrior: A Book That Chang...	965.0	2	4.500000
865	Fever Pitch	246.0	2	4.000000
866	A Great and Terrible Beauty (Gemma Doyle #1)	22.0	4	3.285714
867	Debt of Honor (Jack Ryan #7)	187.0	1	3.000000
868	Lover Revealed (Black Dagger Brotherhood #4)	411.0	3	4.750000
869	Middlesex	437.0	5	3.421053
870	Into the Wild	358.0	5	4.000000
871	This Lullaby	923.0	4	4.000000
872	Sex Drugs and Cocoa Puffs: A Low Culture Man...	558.0	3	3.666667
873	Brother Odd (Odd Thomas #3)	128.0	2	3.000000
874	The Secret of the Old Clock (Nancy Drew Myster...	866.0	2	3.500000
875	Picture Perfect	512.0	2	3.000000
876	The Da Vinci Code (Robert Langdon #2)	696.0	6	3.830508
877	Corelli's Mandolin	163.0	3	3.000000
878	Morrigan's Cross (Circle Trilogy #1)	448.0	2	4.500000
879	Fragile Things: Short Fictions and Wonders	264.0	2	4.000000
880	The Elegant Universe: Superstrings Hidden Dim...	712.0	2	3.500000
881	At First Sight (Jeremy Marsh & Lexie Darnell #2)	89.0	3	3.666667
882	School's Out—Forever (Maximum Ride #2)	553.0	3	5.000000
883	Midnight for Charlie Bone (The Children of the...	438.0	2	3.500000
884	The Lightning Thief (Percy Jackson and the Oly...	779.0	6	4.080645
885	The Hot Zone: The Terrifying True Story of the...	751.0	3	4.000000
886	World's End (The Sandman #8)	995.0	2	4.500000
887	Fablehaven (Fablehaven #1)	233.0	4	4.200000
888	The Quickie	842.0	2	3.500000
889	Slapstick or Lonesome No More!	576.0	2	3.000000
890	Fathers and Sons	243.0	2	4.500000
891	The Bone Collector (Lincoln Rhyme #1)	654.0	3	4.000000
892	Heart of Darkness	308.0	4	3.916667
893	The Shining	869.0	5	4.176471
894	No Country for Old Men	479.0	4	4.400000
895	In a Sunburned Country	346.0	3	4.333333

896	Postmortem (Kay Scarpetta #1)	521.0	3	4.000000
897	The Doors of Perception & Heaven and Hell	708.0	2	4.000000
898	Dance Dance Dance	175.0	2	4.500000
899	A Thousand Acres	50.0	2	3.500000
900	The Hunchback of Notre-Dame	755.0	3	3.600000
901	Angels Fall	76.0	2	5.000000
902	Birdsong	100.0	2	3.500000
903	Enduring Love	218.0	2	3.500000
904	Monster	445.0	2	2.500000
905	The Street Lawyer	877.0	3	3.000000
906	Uglies (Uglies #1)	950.0	5	4.055556
907	Complications: A Surgeon's Notes on an Imperfe...	157.0	2	4.000000
908	Don Quixote	192.0	3	3.666667
909	A Long Way Gone: Memoirs of a Boy Soldier	31.0	4	4.166667
910	Step on a Crack (Michael Bennett #1)	596.0	2	4.500000
911	Pandora's Star	499.0	2	3.000000
912	The Razor's Edge	845.0	2	3.500000
913	Lord John and the Private Matter (Lord John Gr...	403.0	2	3.500000
914	The Devil Wears Prada (The Devil Wears Prada #1)	700.0	4	3.384615
915	The Tale of Peter Rabbit	880.0	2	4.428571
916	The Cay (The Cay #1)	674.0	2	4.000000
917	Tropic of Cancer	939.0	2	2.500000
918	Messenger (The Giver #3)	433.0	4	3.500000
919	Heidi (Heidi #1-2)	309.0	3	4.666667
920	The Road Not Taken and Other Poems	855.0	1	3.500000
921	The Rescue	849.0	3	4.166667
922	Size 12 Is Not Fat (Heather Wells #1)	571.0	3	3.333333
923	All-American Girl (All-American Girl #1)	67.0	3	4.666667
924	Ghost Story	278.0	2	2.666667
925	Exodus	231.0	2	4.000000
926	Metro Girl (Alex Barnaby #1)	435.0	2	4.000000
927	Season of Mists (The Sandman #4)	555.0	2	4.500000
928	Nickel and Dimed: On (Not) Getting by in America	475.0	4	4.166667
929	Rising Sun	543.0	2	4.500000

930	Snow Crash	580.0	4	4.142857
931	Creepshow	165.0	1	4.500000
932	The Magus	791.0	2	4.000000
933	Quicksilver (The Baroque Cycle #1)	530.0	2	4.500000
934	The War of Art: Break Through the Blocks & Win...	902.0	2	5.000000
935	The Killing Dance (Anita Blake Vampire Hunter...	769.0	2	4.000000
936	Case Histories (Jackson Brodie #1)	138.0	3	4.333333
937	The Aeneid	626.0	2	4.000000
938	Twenty Thousand Leagues Under the Sea (Extraor...	947.0	3	4.600000
939	The Rules of Attraction	858.0	2	2.500000
940	The Cat in the Hat and Other Dr. Seuss Favorites	NaN	1	NaN
941	His Majesty's Dragon (Temeraire #1)	317.0	3	3.666667
942	The Monk Who Sold His Ferrari: A Fable About F...	800.0	3	4.333333
943	Nicolae (Left Behind #3)	476.0	2	4.000000
944	Cannery Row	135.0	3	3.750000
945	Honeymoon (Honeymoon #1)	322.0	2	3.500000
946	The No. 1 Ladies' Detective Agency (No. 1 Ladi...	810.0	4	3.500000
947	Moving Pictures (Discworld #10; Industrial Re...	451.0	2	3.000000
948	The Spirit Catches You and You Fall Down: A Hm...	875.0	3	4.000000
949	London Bridges (Alex Cross #10)	400.0	2	4.000000
950	Touching the Void: The True Story of One Man's...	932.0	2	3.500000
951	Wintersmith (Discworld #35; Tiffany Aching #3)	986.0	2	3.500000
952	Hideaway	314.0	1	4.000000
953	Circus of the Damned (Anita Blake Vampire Hun...	152.0	2	3.666667
954	Foucault's Pendulum	258.0	2	3.000000
955	Dragonsinger (Harper Hall #2)	197.0	2	3.000000
956	The Complete Short Stories of Ernest Hemingway	687.0	2	4.500000
957	The Zahir	918.0	3	4.000000
958	The Burden of Proof (Kindle County Legal Thril...	666.0	1	3.500000
959	Animal Farm / 1984	80.0	3	3.666667
960	Lysistrata	413.0	1	4.000000
961	For One More Day	253.0	4	3.250000
962	Haunted	305.0	3	3.666667
963	Without Fail (Jack Reacher #6)	988.0	3	4.333333



964	Welcome to Temptation (Dempseys #1)	967.0	2	5.000000
965	Kafka on the Shore	374.0	5	4.125000
966	In the Hand of the Goddess (Song of the Liones...	347.0	2	5.000000
967	Foundation (Foundation #1)	259.0	4	4.230769
968	The Long Winter (Little House #6)	782.0	2	4.000000
969	The Cabinet of Curiosities (Pendergast #3)	667.0	2	3.000000
970	Three to Get Deadly (Stephanie Plum #3)	927.0	3	4.200000
971	Out of the Silent Planet (The Space Trilogy #1)	496.0	3	3.666667
972	I Am the Messenger	338.0	4	3.500000
973	Rosencrantz and Guildenstern Are Dead	546.0	3	4.333333
974	Forever . . .	255.0	2	4.000000
975	The Book Thief	656.0	6	4.264151
976	Blindsighted (Grant County #1)	112.0	2	4.500000
977	Stolen (Women of the Otherworld #2)	598.0	2	5.000000
978	Norwegian Wood	481.0	5	3.888889
979	Hot Six (Stephanie Plum #6)	326.0	3	3.500000
980	Echo Park (Harry Bosch #12; Harry Bosch Unive...	208.0	2	4.500000
981	The Birth of Venus	644.0	3	3.250000
982	Dream Country (The Sandman #3)	199.0	2	4.333333
983	Fear Nothing (Moonlight Bay #1)	245.0	2	3.500000
984	Sideways Stories from Wayside School (Wayside ...	569.0	3	4.666667
985	The Maltese Falcon	792.0	3	4.000000
986	Skinny Legs and All	574.0	2	4.000000
987	The Amber Spyglass (His Dark Materials #3)	631.0	4	3.888889
988	J.R.R. Tolkien 4-Book Boxed Set: The Hobbit an...	361.0	2	4.000000
989	Howl's Moving Castle (Howl's Moving Castle #1)	334.0	4	4.500000
990	Along Came a Spider (Alex Cross #1)	69.0	3	3.769231
991	Swann's Way (In Search of Lost Time #1)	609.0	2	3.000000
992	Tara Road	612.0	3	3.333333
993	She's Come Undone	561.0	4	4.000000
994	The Art of Loving	635.0	2	4.500000
995	The Tale of Despereaux	879.0	4	3.800000
996	The Other Woman	817.0	2	4.500000
997	To the Nines (Stephanie Plum #9)	931.0	2	4.500000

998	Narcissus in Chains (Anita Blake Vampire Hunt...	467.0	2	3.000000
999	A Princess of Mars (Barsoom #1)	42.0	2	4.500000

```
In [35]: pd.io.sql.read_sql('''
        select p.publisher,
               count(*) cnt
        from publishers p
        join (select title,
                     book_id,
                     publisher_id
        from books
        where num_pages > 50) b on b.publisher_id=p.publisher_id
        group by p.publisher
        order by cnt desc
        limit 1
        ''', con = engine)
```

```
Out[35]:
```

	publisher	cnt
0	Penguin Books	42

Больше всего книг выпустило издание Penguin Books

```
In [36]: pd.io.sql.read_sql('''
        select a.author,
               r.avg_rating
        from books b
        join (select
               book_id,
               avg(rating) avg_rating
        from ratings
        group by book_id
        having count(book_id) > 50) r on b.book_id=r.book_id
        join authors a on a.author_id=b.author_id
        group by a.author, r.avg_rating
        order by r.avg_rating desc
        limit 1
        ''', con = engine)
```

```
Out[36]:
```

	author	avg_rating
0	J.K. Rowling/Mary GrandPré	4.414634

```
In [37]: pd.io.sql.read_sql('''
        select a.author,
               avg(r.avg_rating)
        from (select
               book_id,
               avg(rating) avg_rating
        from ratings
        group by book_id
        having count(book_id) > 50) r
        left join books b on b.book_id=r.book_id
        left join authors a on a.author_id=b.author_id
        group by a.author
        order by avg(r.avg_rating) desc
        limit 1
        ''', con = engine)
```

```
Out[37]:
```

	author	avg
0	J.K. Rowling/Mary GrandPré	4.283844

Самая высокая средняя оценка (4.41) для авторов, по книгам, которые набрали больше 50 оценок у автора J.K. Rowling/Mary GrandPré

```
In [38]: pd.io.sql.read_sql('''
        select round(avg(cnt))
        from (select re.username,
               count(*) cnt
        from reviews re
        join (select
               username,
               count(*) cnt
        from ratings
        group by username
        having count(*) > 50) ra on ra.username=re.username
        group by re.username
        order by cnt desc) t
        ''', con = engine)
```

```
Out[38]:
```

	round
0	24.0

В среднем, пользователи у которых больше 50 оценок, оставляют 24 отзывов

## Выводы

Предобработка данных не требуется

Исследовательский анализ данных (с использованием SQL)

- После 1 января 2000 вышло 819 книг
- Больше всего книг (42) выпустило издание Penguin Books
- Самая высокая средняя оценка (4.41) для авторов, по книгам, которые набрали больше 50 оценок у автора J.K. Rowling/Mary GrandPré
- В среднем, пользователи у которых больше 50 оценок, оставляют 24 отзывов
- Получена сводная таблица, в которой для каждой книги есть информация о количестве обзоров и средней оценке, с таблицей можно ознакомиться в исследовании

In [ ]: