Resultados - Parte C

Pedro Henrique Cerávolo dos Santos

LETRA A):

Resultado utilizando dataframes

```
Utilizando views: 5 comentários mais úteis e com maior avaliação
+----+
  date| customer|helpful|rating|
+----+
|2004-9-28|A3G4NSG8P49G4L|
                           4|
                              5|
| 2004-9-7|A2JN4QDPI4V8RX|
                          3|
                             5|
|2004-1-15|A3HZ186ZL3U64Q|
                          15|
                              51
| 2004-1-7| ASIQ1W5YH72A6|
                          1|
                             5|
```

```
Segunda query: 5 comentários mais úteis e com menor avaliação
```

1|

5

```
+----+
  date| customer|helpful|rating|
+----+
|2004-9-28|A3G4NSG8P49G4L|
                        4|
                            5|
| 2004-9-7|A2JN4QDPI4V8RX|
                       3|
                           5
|2004-1-15|A3HZ186ZL3U64Q|
                           51
                       15|
| 2004-1-7| ASIQ1W5YH72A6|
```

+----+

LETRA B):

Com dataframes

```
+----+
  ASIN|salesrank| similar|
+----+
|B00003CXQY| 10036|B00004R99S|
|B00005TN8K| 4104|B00004R99S|
|B00005TN8L| 61806|B00004R99S|
|B00005AR3H| 29857|B00004R99S|
|B00005TN8J| 13143|B00004R99S|
|6304437765| 60933|B00004R99S|
+----+
```

Produtos similares com salesrank maior que B00004R99S

```
+----+
  ASIN|salesrank|ex similars|salesrank|
+----+
|B00004R99S| 2050| B00005TN8K|
                      4104
|B00004R99S| 2050| B00004R99J|
                      4359
+----+
```

LETRA C):

Evolução das avaliações de 0486220125

```
+----+
   date|avgRating|
+----+
| 1997-7-4|
              5|
|1998-10-11|
               5|
| 1999-4-15|
               5|
| 2000-1-4|
              4|
| 2000-2-8|
              4|
| 2000-4-28|
              4
| 2001-10-9|
              4
| 2002-11-8|
              4
| 2002-12-4|
              4|
| 2002-9-26|
              4|
|2003-10-10|
               4
|2003-10-21|
               4
|2003-10-26|
               4
|2003-12-30|
               4
| 2003-4-21|
               4
| 2003-7-24|
              4|
| 2004-5-1|
              4
+----+
```

Utilizando views

Evolução das avaliações de 0486220125

T	Т
date	rating
+	+
1997-7-4	5.0
1998-10-11	5.0
1999-4-15	5.0

```
| 2000-1-4|
                  4.75
| 2000-2-8|
                  4.8
| 2000-4-28|4.83333333333333333
| 2001-10-9|4.857142857142857|
| 2002-11-8|
                  4.875
| 2002-12-4|4.4444444444445|
| 2002-9-26|
                   4.2
|2003-10-10|4.181818181818182|
|2003-10-21|
                   4.25
|2003-10-26|4.230769230769231|
|2003-12-30|4.285714285714286|
| 2003-4-21|4.26666666666667|
| 2003-7-24|
                  4.25
| 2004-5-1|4.235294117647059|
+----+
LETRA D):
  |d|
        ASIN
                      title
                              group|salesrank|
                                                     similar
                                                                  categories
reviews|rank|
|548526|B00005QBZI| From Soup to Nuts|
                                            Video|
                                                       0|[B00005R1O2,
B000...|[|[139452]|VHS[40...|[[date -> 2004-6-...| 1|
|297444|6300215539| The War of the W...|
                                                      1|[B00005JKFR,
                                           Video
B000...|[|[139452]|VHS[40...|[[date -> 1998-12...| 2|
| 28339|6301627024| Shirley Valentine|
                                                    2|[6302728657,
                                         Videol
B000...|[|[139452]|VHS[40...|[[date -> 1999-1-...| 3|
|113500|B00005T33H| Leslie Sansone -...|
                                                      6|[B00008DDJD,
                                           Videol
B000...|[|[139452]|VHS[40...|[[date -> 2002-1-...| 4|
|334784|6302946387| Robin Hood - Men...|
                                            Video
                                                      7|[B00000K3CQ,
0792...|[|[139452]|VHS[40...|[[date -> 1998-12...| 5|
|486684|6301729897| Richard Simmons ...|
                                            Videol
                                                       8|[B0000065NH,
6303...|[|[139452]|VHS[40...|[[date -> 1998-11...| 6|
|112817|6300185788| Howard the Duck|
                                            Video
                                                      12|[1558807225,
B000...|[|[139452]|VHS[40...|[[date -> 1999-2-...| 7|
|385458|6304015127| Charlotte's Web|
                                          Video
                                                     14|[B00005QJEF,
B000...|[|[139452]|VHS[40...|[[date -> 1999-3-...| 8|
|347515|6301773586| A Tree Grows in ...| Video|
                                                     16|[B0004Z322O,
0060...|[|[139452]|VHS[40...|[[date -> 1998-7-...| 9|
```

```
|407073|6304500831|
                        The Jungle Book
                                             Video
                                                       17|[B00001QEE7,
B000...|[|[139452]|VHS[40...|[[date -> 1998-12...| 10]
|257106|0963679600| IlluStory Book Kit|
                                            Toy
                                                     59|[B00000J0C9,
B000...|[|Books[283155]|S...|[[date -> 1998-6-...| 1|
|465900|1572810939| Wizard Card Game...|
                                                Toy
                                                       1890|[B00000IV35,
B000...|[|Books[283155]|S...|[[date -> 1999-10...|
                                                2
|305664|0963679678| Photostory Junio...|
                                                    2288|[0963679600,
                                             Toy
B000...|[|Books[283155]|S...|[[date -> 2003-12...| 3|
|327405|B000059T05| Party Tyme Karao...|
                                               Toy
                                                      4053|[B00004ZBDB,
B000...|[|Music[5174]|Sty...|[[date -> 2001-5-...|
                                              4
| 922|B000075A8O| Party Tyme Karao...|
                                                     7812|[B0000CD5HT,
                                             Toy
B000...|[|Music[5174]|Sty...|[[date -> 2004-3-...|
                                              5
|272037|B000053W7W| Party Tyme Karao...|
                                                Toy
                                                       10732|[B000068NK8,
B000...|[|Music[5174]|Sty...|[[date -> 2001-1-...|
                                              6
| 11660|B000055XW3| The Songs of Bri...|
                                                    31296|[B0000CD5HW,
                                              Toy|
B000...|[|Music[5174]|Sty...|[[date -> 2001-2-...|
                                             7
|421292|0963679627| R- Photostory Se...|
                                             Toy
                                                    45241
[]|[|Books[283155]|S...|
                                [] 8
|548547|B000059TOC|
                           The Drifter
                                                     0|[630366704X,
                                           DVDI
B000...|[|[139452]|DVD[13...|[[date -> 2004-7-...| 1|
|548548|B00006JBIX| The House Of Mor...|
                                               DVDI
                                                         0|[B0002HOE6C,
B000...|[|[139452]|DVD[13...|[[date -> 2005-2-...| 2|
|548550|B00008DDST| 1, 2, 3 Soleils:...|
                                            DVD
                                                      0|[B00012FWNC,
B000...|[|[139452]|DVD[13...|[[date -> 2003-12...| 3|
|193107|B00003CX5P| Star Wars - Epis...|
                                              DVD
                                                       28|[B00003CXCT,
B000...|[|[139452]|DVD[13...|[[date -> 2000-1-...| 4|
|137401|B00006CXSS| Band of Brothers|
                                                        47|[B0001NBLVI,
                                               DVD
B000...|[|[139452]|DVD[13...|[[date -> 2001-11...| 5|
|104775|B00001QEE7| The Little Merma...|
                                               DVD
                                                        49|[B00003CX8Y,
B000...|[|[139452]|DVD[13...|[[date -> 1999-1-...| 6|
|547782|B00000JS62| The Wizard of Oz|
                                              DVD
                                                        55|[B00005QJEF,
B000...|[|[139452]|DVD[13...|[[date -> 1998-12...| 7|
|136839|B00005LC1H| Fawlty Towers - ...|
                                              DVD
                                                       85|[B00005A1SX,
B000...|[|[139452]|DVD[13...|[[date -> 1998-11...| 8|
|544622|B00006HBUJ| Star Wars - Epis...|
                                              DVD
                                                       85|[B00003CXCT,
B000...|[|[139452]|DVD[13...|[[date -> 2001-9-...| 9|
| 7524|B00000JWVS| Jerry Seinfeld L...|
                                                      88|[B00005JLW5,
                                            DVDI
B000...|[|[139452]|DVD[13...|[[date -> 1999-9-...| 10|
|310467|B00002EPXM| Yoga Kit Living ...|
                                            Sports
                                                     4684|[B00007JME6,
0945...|[|[139452]|VHS[40...|[[date -> 2001-8-...| 1|
|197564|0880881658| Baby'S Record Ke...|Baby Product|
                                                          1017|[B00009NQTT,
B000...|[|Books[283155]|S...|[[date -> 2000-7-...| 1|
```

```
| 51902|0761542639| PRIMA PUBLISHING...| Video Games|
                                                              339|[B00006Z7HR,
0761...|[|Books[283155]|S...|[[date -> 2003-5-...| 1|
|548530|0006176909|
                        House of Cards
                                             Book
                                                       0|[0006471641,
0006...|[|Books[283155]|S...|[[date -> 2002-11...| 1|
|548540|0060537612| If You Take a Mo...|
                                             Book
                                                        0|[0689808747,
0689...|[|Books[283155]|S...|[[date -> 2003-12...| 2|
|548513|0072507624| How To Get The B...|
                                               Book
                                                         0|[0500284768,
0316...|[|Books[283155]|S...|[[date -> 1999-3-...|
                                               31
|548529|0310208084|
                        Ten Time Bombs
                                              Book
                                                         0|[0310479711,
0802...|[|Books[283155]|S...|[[date -> 2000-6-...| 4|
|548520|0465028721| The Diligent: A ...|
                                                      0|[0684835657,
                                            Book
0198...|[|Books[283155]|S...|[[date -> 2004-8-...| 5|
|548535|0552139432|
                        Lost for Words
                                            Book
                                                      0
[]|[|Books[283155]|S...|[[date -> 2003-8-...| 6|
|548524|0575068957| Noonshade (Chron...|
                                               Book
                                                         0|[0575073330,
0345...|[|Books[283155]|S...|[[date -> 2003-8-...| 7|
|548527|0743001370| Harry Potter Tra...|
                                            Book|
                                                      0
[]|[|Books[283155]|S...|[[date -> 2003-8-...| 8|
                           Black Out
|548532|0752808990|
                                          Book
                                                     0
[]|[|Books[283155]|S...|[[date -> 2005-3-...|
|548515|0785111263| Gods on Earth (T...|
                                                        0|[0785111271,
                                             Book|
0785...|[|Books[283155]|S...|[[date -> 2003-9-...| 10|
|548536|B00004XT2L| Improvisations -...|
                                            Music
                                                       0|[B000051TKB,
B000...|[|Music[5174]|Sty...|[[date -> 2005-1-...|
                                              1|
|548545|B0000508ZN| | Need Your Loving|
                                              Music
                                                         0
[]|[|Music[5174]|Sty...|[[date -> 2004-6-...| 2|
|548551|B00005MHUG| That Travelin' T...|
                                                        0|[B00008OETQ,
                                             Music
B000...|[|Music[5174]|Sty...|[[date -> 2004-5-...| 3|
|548544|B000065AHM|
                             Lucky Man
                                            Music|
                                                       0
[B00021YIE6]|[|Music[5174]|Sty...|[[date -> 2002-6-...|
                                                     4|
|370604|B00004S36S|
                            Buzz Buzz
                                           Music|
                                                      27|[B00004S36U,
B000...|[|Music[5174]|Sty...|[[date -> 2000-3-...| 5|
|536884|B000069AUI| A Rush of Blood ...|
                                             Music|
                                                       33|[B0000508U6,
B000...|[|Music[5174]|Sty...|[[date -> 2002-8-...| 6|
|450096|B000088E6D|
                          Michael Bublé
                                            Music|
                                                       42|[B00070Q7VO,
B000...|[|Music[5174]|Sty...|[[date -> 2003-2-...| 7|
|187690|B00005YW4H| Come Away with Me|
                                                 Music
                                                           46|[B00018D44U,
B000...|[|Music[5174]|Sty...|[[date -> 2002-2-...|
                                              81
|175533|B00006879E| Songs About Jane|
                                              Music
                                                         53|[B0000ALSDR,
B000...|
                  [] 9
|124898|B00000JFG3|
                          Facing Future
                                                      55|[B00005O4UG,
                                            Music
B000...|[|Music[5174]|Sty...|[[date -> 1999-8-...| 10|
```

```
|527037|157264317X| ClickArt Christi...| Software|
                                                   200|[B00005BL14,
B000...|[|Books[283155]|S...|[[date -> 2001-9-...| 1|
| 96696|B000001A3A| RINGDISC Wagner:...| Software|
                                                        327|[0879101865,
B000...|[|Books[283155]|S...|[[date -> 2000-3-...| 2|
|456958|0310230691| Zondervan Bible ...| Software|
                                                     1955|[031024837X,
0310...|[|[229534]|Catego...|[[date -> 2003-9-...| 3|
|532431|B0000897BV| Just Enough Voca...| Software
                                                      3771
[]|[|[229534]|Catego...|[[date -> 2004-1-...| 4|
|243257|0735608377| WINDOWS NT SERVE...| Software|
                                                          3828
[]|[|Books[283155]|S...|[[date -> 1999-11...| 5|
|224434|1567120709| SPELLING CORRECTOR|
                                                    CE
                                                          39367
[]|[|Books[283155]|S...|
                               [] 1<sub>[</sub>
|253628|6305275149| Hal Leonard Begi...|
                                             CEI
                                                   69089
[]|[|[139452]|VHS[40...|[[date -> 2000-7-...| 2|
|228901|6305275173| Hal Leonard Begi...|
                                             CEI
                                                   71678
[]|[][139452]|VHS[40...|
|289495|1567125336| FRANKLIN COMP. K...|
                                                CE<sub>|</sub> 84976<sub>|</sub>
[]|[|[172282]|Catego...|[[date -> 1999-12...| 4|
Utilizando views:
| Id| ASIN|
                      title|
                              group|salesrank|
                                                     similar|
                                                                  categories
reviews|rank|
                  +----+-----
----+
|548526|B00005QBZI| From Soup to Nuts|
                                            Video
                                                       0|[B00005R1O2,
B000...|[|[139452]|VHS[40...|[[date -> 2004-6-...| 1|
|297444|6300215539| The War of the W...|
                                           Video
                                                      1|[B00005JKFR,
B000...|[|[139452]|VHS[40...|[[date -> 1998-12...| 2|
| 28339|6301627024| Shirley Valentine|
                                         Video
                                                    2|[6302728657,
B000...|[|[139452]|VHS[40...|[[date -> 1999-1-...| 3|
|113500|B00005T33H| Leslie Sansone -...|
                                                      6|[B00008DDJD,
                                           Video
B000...|[|[139452]|VHS[40...|[[date -> 2002-1-...| 4|
|334784|6302946387| Robin Hood - Men...|
                                           Videol
                                                      7|[B00000K3CQ,
0792...|[|[139452]|VHS[40...|[[date -> 1998-12...| 5|
```

```
|486684|6301729897| Richard Simmons ...|
                                              Video|
                                                        8|[B0000065NH,
6303...|[|[139452]|VHS[40...|[[date -> 1998-11...| 6|
|112817|6300185788|
                       Howard the Duck
                                             Video
                                                        12|[1558807225,
B000...|[|[139452]|VHS[40...|[[date -> 1999-2-...| 7|
|385458|6304015127|
                       Charlotte's Web
                                            Video
                                                      14|[B00005QJEF,
B000...|[|[139452]|VHS[40...|[[date -> 1999-3-...| 8|
|347515|6301773586| A Tree Grows in ...|
                                                       16|[B0004Z322O,
                                            Video
0060...|[|[139452]|VHS[40...|[[date -> 1998-7-...| 9|
|407073|6304500831|
                       The Jungle Book
                                             Video
                                                       17|[B00001QEE7,
B000...|[|[139452]|VHS[40...|[[date -> 1998-12...| 10|
|257106|0963679600| IlluStory Book Kit|
                                                     59|[B00000J0C9,
                                            Toy
B000...|[|Books[283155]|S...|[[date -> 1998-6-...|
                                               1
|465900|1572810939| Wizard Card Game...|
                                                Toy
                                                       1890|[B00000IV35,
B000...|[|Books[283155]|S...|[[date -> 1999-10...|
                                                2
|305664|0963679678| Photostory Junio...|
                                                    2288|[0963679600,
                                             Toy
B000...|[|Books[283155]|S...|[[date -> 2003-12...| 3|
|327405|B000059T05| Party Tyme Karao...|
                                               Toy
                                                      4053|[B00004ZBDB,
B000...|[|Music[5174]|Sty...|[[date -> 2001-5-...|
                                              4|
922|B000075A8O| Party Tyme Karao...|
                                                     7812|[B0000CD5HT,
                                              Toy|
B000...|[|Music[5174]|Sty...|[[date -> 2004-3-...| 5|
|272037|B000053W7W| Party Tyme Karao...|
                                                       10732|[B000068NK8,
                                                Toy
B000...|[|Music[5174]|Sty...|[[date -> 2001-1-...|
                                              6
| 11660|B000055XW3| The Songs of Bri...|
                                              Toy
                                                    31296|[B0000CD5HW,
B000...|[|Music[5174]|Sty...|[[date -> 2001-2-...|
                                              7
|421292|0963679627| R- Photostory Se...|
                                              Toy
                                                    45241|
[]|[|Books[283155]|S...|
                                []| 8|
                           The Drifter
|548547|B000059TOC|
                                                     0|[630366704X,
                                           DVDI
B000...|[|[139452]|DVD[13...|[[date -> 2004-7-...| 1|
|548548|B00006JBIX| The House Of Mor...|
                                               DVD
                                                         0|[B0002HOE6C,
B000...|[|[139452]|DVD[13...|[[date -> 2005-2-...| 2|
|548550|B00008DDST| 1, 2, 3 Soleils:...|
                                            DVD
                                                      0|[B00012FWNC,
B000...|[|[139452]|DVD[13...|[[date -> 2003-12...| 3|
|193107|B00003CX5P| Star Wars - Epis...|
                                              DVDI
                                                       28|[B00003CXCT,
B000...|[|[139452]|DVD[13...|[[date -> 2000-1-...| 4|
|137401|B00006CXSS| Band of Brothers|
                                               DVD
                                                        47|[B0001NBLVI,
B000...|[|[139452]|DVD[13...|[[date -> 2001-11...| 5|
|104775|B00001QEE7| The Little Merma...|
                                               DVDI
                                                        49|[B00003CX8Y,
B000...|[|[139452]|DVD[13...|[[date -> 1999-1-...| 6|
|547782|B00000JS62| The Wizard of Oz|
                                              DVDI
                                                        55|[B00005QJEF,
B000...|[|[139452]|DVD[13...|[[date -> 1998-12...| 7|
|136839|B00005LC1H| Fawlty Towers - ...|
                                              DVDI
                                                       85|[B00005A1SX,
B000...|[|[139452]|DVD[13...|[[date -> 1998-11...| 8|
```

```
|544622|B00006HBUJ| Star Wars - Epis...|
                                               DVDI
                                                        85|[B00003CXCT,
B000...|[|[139452]|DVD[13...|[[date -> 2001-9-...| 9|
| 7524|B00000JWVS| Jerry Seinfeld L...|
                                             DVDI
                                                      88|[B00005JLW5,
B000...|[|[139452]|DVD[13...|[[date -> 1999-9-...| 10|
|310467|B00002EPXM| Yoga Kit Living ...|
                                            Sports
                                                      4684|[B00007JME6,
0945...|[|[139452]|VHS[40...|[[date -> 2001-8-...| 1|
|197564|0880881658| Baby'S Record Ke...|Baby Product|
                                                           1017|[B00009NQTT,
B000...|[|Books[283155]|S...|[[date -> 2000-7-...| 1|
| 51902|0761542639| PRIMA PUBLISHING...| Video Games|
                                                              339|[B00006Z7HR,
0761...|[|Books[283155]|S...|[[date -> 2003-5-...| 1|
|548530|0006176909|
                        House of Cards
                                                        0|[0006471641,
                                             Book
0006...|[|Books[283155]|S...|[[date -> 2002-11...| 1|
|548540|0060537612| If You Take a Mo...|
                                              Book|
                                                        0|[0689808747,
0689...|[|Books[283155]|S...|[[date -> 2003-12...| 2|
|548513|0072507624| How To Get The B...|
                                               Book|
                                                          0|[0500284768,
0316...|[|Books[283155]|S...|[[date -> 1999-3-...| 3|
                                               Book
|548529|0310208084|
                        Ten Time Bombs
                                                         0|[0310479711,
0802...|[|Books[283155]|S...|[[date -> 2000-6-...| 4|
|548520|0465028721| The Diligent: A ...|
                                                      0|[0684835657,
                                            Bookl
0198...|[|Books[283155]|S...|[[date -> 2004-8-...| 5|
|548535|0552139432|
                         Lost for Words
                                            Bookl
                                                       0
[]|[|Books[283155]|S...|[[date -> 2003-8-...| 6|
|548524|0575068957| Noonshade (Chron...|
                                               Book
                                                          0|[0575073330,
0345...|[|Books[283155]|S...|[[date -> 2003-8-...| 7|
|548527|0743001370| Harry Potter Tra...|
                                             Book|
                                                       0
[]|[|Books[283155]|S...|[[date -> 2003-8-...|
|548532|0752808990|
                            Black Outl
                                           Book
                                                     0
[]|[|Books[283155]|S...|[[date -> 2005-3-...|
|548515|0785111263| Gods on Earth (T...|
                                                        0|[0785111271,
                                              Book|
0785...|[|Books[283155]|S...|[[date -> 2003-9-...| 10|
|548536|B00004XT2L| Improvisations -...|
                                            Music|
                                                        0|[B000051TKB,
B000...|[|Music[5174]|Sty...|[[date -> 2005-1-...| 1|
|548545|B0000508ZN| | | Need Your Loving|
                                              Music
                                                          0
[]|[|Music[5174]|Sty...|[[date -> 2004-6-...| 2|
|548551|B00005MHUG| That Travelin' T...|
                                                         0|[B00008OETQ,
                                             Music
B000...|[|Music[5174]|Sty...|[[date -> 2004-5-...| 3|
|548544|B000065AHM|
                             Lucky Man
                                             Music
                                                        0
[B00021YIE6]|[|Music[5174]|Sty...|[[date -> 2002-6-...| 4|
|370604|B00004S36S|
                            Buzz Buzz
                                            Music
                                                      27|[B00004S36U,
B000...|[|Music[5174]|Sty...|[[date -> 2000-3-...| 5|
|536884|B000069AUI| A Rush of Blood ...|
                                             Music
                                                        33|[B0000508U6,
B000...|[|Music[5174]|Sty...|[[date -> 2002-8-...| 6|
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|450096|B000088E6D|
                        Michael Bublé
                                         Music
                                                   42|[B00070Q7VO,
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|187690|B00005YW4H| Come Away with Me|
                                             Music
                                                       46|[B00018D44U,
B000...|[|Music[5174]|Sty...|[[date -> 2002-2-...| 8|
|175533|B00006879E| Songs About Jane|
                                           Music
                                                     53|[B0000ALSDR,
B000...|
                 Ш
                            [] 9
                        Facing Future
|124898|B00000JFG3|
                                        Music
                                                  55|[B00005O4UG,
B000...|[|Music[5174]|Sty...|[[date -> 1999-8-...| 10|
|527037|157264317X| ClickArt Christi...| Software|
                                                 200|[B00005BL14,
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| 96696|B000001A3A| RINGDISC Wagner:...| Software|
                                                      327|[0879101865,
B000...|[|Books[283155]|S...|[[date -> 2000-3-...| 2|
|456958|0310230691| Zondervan Bible ...| Software|
                                                   1955|[031024837X,
0310...|[|[229534]|Catego...|[[date -> 2003-9-...| 3|
|532431|B0000897BV| Just Enough Voca...| Software|
                                                     3771
[]|[|[229534]|Catego...|[[date -> 2004-1-...| 4|
|243257|0735608377| WINDOWS NT SERVE...| Software|
                                                        3828
[]|[|Books[283155]|S...|[[date -> 1999-11...| 5|
|224434|1567120709| SPELLING CORRECTOR|
                                                  CEI
                                                        393671
[][[Books[283155]|S...|
                              [] 1
|253628|6305275149| Hal Leonard Begi...|
                                                 69089
                                           CEI
[]|[|[139452]|VHS[40...|[[date -> 2000-7-...| 2|
|228901|6305275173| Hal Leonard Begi...|
                                           CEI
                                                 71678
[]|[][139452]|VHS[40...|
                              [] 3
|289495|1567125336| FRANKLIN COMP. K...|
                                               CE<sub>|</sub> 84976<sub>|</sub>
[]|[|[172282]|Catego...|[[date -> 1999-12...| 4|
LETRA F):
Com dataframes
    group| avgRating|
     Toy|20.5833333333333332|
|Baby Product|13.333333333333334|
   Sports|
                 12.25
  Software| 9.26666666666667|
     Book | 3.9715033967909963 |
+----+
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Com views

```
+-----+
| category|avg(CAST(helpful AS DOUBLE))|
+-----+
||Books[283155]|Su...| 97.7872340425532|
||Books[283155]|Su...| 84.5|
||[229534]|Special...| 84.5|
||[139452]|DVD[130...| 80.0|
||[139452]|DVD[130...| 80.0|
+------+
```

LETRA G):

Com dataframes:

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group
       customer|frequencia|rank|
Video | ATVPDKIKX0DER |
                       72581| 1|
Video|A3UN6WX5RRO2AG|
                         15814 2
Video|A2NJO6YE954DBH|
                        1775| 3|
Video AU8552YCOO5QX
                        1205| 4|
Video|A3P1A63Q8L32C5|
                        737| 5|
                          720 6
Video|A20EEWWSFMZ1PN|
Video|A16CZRQL23NOIW|
                         668 7
                        614| 8|
Video|A3LZGLA88K0LA0|
Video|A2QRB6L1MCJ53G|
                         606| 9|
                         583 10
Video|A152C8GYY25HAH|
Toy|A1SB7SB31ETYZH|
                         2 1
                        2 2
Toy| AH4M07U4YC695|
Toy| ATVPDKIKX0DER|
                        2 3
Toy|A1A2RJXP6T26PD|
                         1| 4|
Toy|A1ABBKXKUZF85X|
                         1| 5|
 Toy|A1BAZPQGXEVWRT|
                          1| 6|
                          1 7
Toy|A1DTOHMM2Y5KY0|
 Toy|A1FPVUL053AKXO|
                         1| 8|
                        1 9
Toy|A1ITRIM68VLZG3|
                         1| 10|
Toy|A1K9DVRKH6TZ1L|
DVD| ATVPDKIKX0DER|
                       63148 1
                         15549| 2|
 DVD|A3UN6WX5RRO2AG|
 DVD|A2NJO6YE954DBH|
                        1366| 3|
```

```
DVD| AU8552YCOO5QX|
                            1213| 4|
     DVD|A3P1A63Q8L32C5|
                            859| 5|
     DVD|A3LZGLA88K0LA0|
                            856| 6|
    DVD| A82LIVYSX6WZ9|
                           683| 7|
    DVD|A152C8GYY25HAH|
                             675| 8|
    DVD|A16CZRQL23NOIW|
                             651| 9|
    DVD|A1CZICCYP2M5PX|
                             650| 10|
   Sports|A18ZVYTEDAOF9A|
                              1 1
   Sports|A1W180Y9O1FALI|
                             1 2
   Sports|A2RHSQZ7MAKKCO|
                               1| 3|
   Sports|A3O8EZOX2P399L|
                             1| 4|
   Sports | AL62LOJKDES3M|
                             1 5
|Baby Product|A2LAH8VX720175|
                               1 1
|Baby Product|A37TFIP0OMKGMW|
                                 1 2
|Baby Product| AI9SB5VKUFXDC|
                               1 3
| Video Games|A1M4NJYP0WNL8Q|
                                 1 1
| Video Games|A226EDS7WDF7S1|
                                 1 2
| Video Games|A3C811U31YG6FS|
                                1 3
    Book ATVPDKIKX0DER
                          643185| 1|
    Book|A3UN6WX5RRO2AG|
                            154531| 2|
    Book|A14OJS0VWMOSWO|
                              9589 3
    Book | AFVQZQ8PW0L|
                           5441| 4|
    Book|A1K1JW1C5CUSUZ|
                            3562 5
    Book|A2NJO6YE954DBH|
                            2055| 6|
                            1651 7
    Book|A3QVAKVRAH657N|
    Book|A1NATT3PN24QWY|
                             1535| 8|
    Book|A1D2C0WDCSHUWZ|
                              1508 9
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only showing top 50 rows

```
Utilizando views:
```

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group
          customer| freq|rank|
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  Video| ATVPDKIKX0DER| 72581| 1|
  Video|A3UN6WX5RRO2AG| 15814| 2|
  Video|A2NJO6YE954DBH| 1775| 3|
  Video| AU8552YCOO5QX| 1205| 4|
  Video|A3P1A63Q8L32C5| 737| 5|
  Video|A20EEWWSFMZ1PN| 720| 6|
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```
Video|A16CZRQL23NOIW| 668| 7|
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- Video|A3LZGLA88K0LA0| 614| 8|
- Video|A2QRB6L1MCJ53G| 606| 9|
- Video|A152C8GYY25HAH| 583 10
- Toy|A1SB7SB31ETYZH| 2 1
- Toy| AH4M07U4YC695| 2 1
- Toy| ATVPDKIKX0DER| 2 1
- Toy|A2KTGCRR7UZRG7| 1 4
- Toy|A1A2RJXP6T26PD| 1 4
- Toy|A3UN6WX5RRO2AG| 1 4
- Toy|A2YO9AKVAHDR9I| 1 4
- Toy|A2PJ7WLZ38F47S| 1| 4|
- Toy| A2JTMTR2BZGLX| 1| 4|
- Toy|A20AL96IIDAEBU| 1| 4|
- Toy|A1BAZPQGXEVWRT| 1| 4|
- Toy|A20R67CABJH79P| 1 4
- Toy|A1ITRIM68VLZG3| 1| 4|
- Toy| AU8PR9XJ17CCB| 1| 4|
- Toy|A1T3I4JU36IPM5| 1| 4|
- Toy| AQJ2XVMHXGN9A| 1| 4|
- Toy|A3S4OTTDBRQ6I1| 1| 4|
- Toy|A1QW8PHDJBH4IC| 1| 4|
- Toy|A1ABBKXKUZF85X| 1 4
- 1| 4|
- Toy|A2U1T90IOVPBAR|
- Toy|A1FPVUL053AKXO| 1 4
- Toy|A34KPXP8CGUBO5| 1| 4|
- Toy|A2BKFX67DBRYPA| 1 4
- Toy|A1DTOHMM2Y5KY0| 1 4 Toy|A3O19HBWE10FFJ| 1| 4|
- Toy| AXNOIMARQCT3M| 1| 4|
- Toy|A1K9DVRKH6TZ1L| 1| 4|
- Toy|A3DWA4FRL41NQD| 1 4
- Toy|A2V5INJFFRP7Z8| 1| 4|
- Toy|A1ZO50XHPV0QPQ| 1 4
- Toy|A1LEF9EM2DFDP2| 1| 4|
- Toy|A1OA2ZW406NQXM| 1| 4|
- Toy| AH16IHWEMA61J| 1| 4|
- Toy|A1OSHA4U8RABFY| 1 4
- DVD| ATVPDKIKX0DER| 63148| 1|
- DVD|A3UN6WX5RRO2AG| 15549| 2|
- DVD|A2NJO6YE954DBH| 1366| 3|
- DVD| AU8552YCOO5QX| 1213| 4|

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DVD|A3P1A63Q8L32C5| 859| 5|
     DVD|A3LZGLA88K0LA0| 856| 6|
     DVD| A82LIVYSX6WZ9| 683| 7|
     DVD|A152C8GYY25HAH| 675| 8|
     DVD|A16CZRQL23NOIW| 651| 9|
     DVD|A1CZICCYP2M5PX| 650| 10|
   Sports|A2RHSQZ7MAKKCO|
                             1 1
   Sports|A1W180Y9O1FALI|
                              1
   Sports|A3O8EZOX2P399L|
                            1|
                               1|
   Sports|A18ZVYTEDAOF9A|
                            1 1
   Sports | AL62LOJKDES3M|
                            1| 1|
|Baby Product|A37TFIP0OMKGMW|
                                1 1
|Baby Product|A2LAH8VX720175|
                                 1|
                              1|
|Baby Product| Al9SB5VKUFXDC|
                              1 1
| Video Games|A3C811U31YG6FS|
                               1 1
| Video Games|A226EDS7WDF7S1|
                                1 1
| Video Games|A1M4NJYP0WNL8Q|
                                1| 1|
    Book| ATVPDKIKX0DER|643185| 1|
    Book|A3UN6WX5RRO2AG|154531| 2|
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    Book|A1NATT3PN24QWY| 1535| 8|
    Book|A1D2C0WDCSHUWZ| 1508| 9|
    Book|A2ODBHT4URXVXQ| 1469| 10|
    Music| ATVPDKIKX0DER|166149| 1|
    Music|A3UN6WX5RRO2AG| 15875| 2|
    Music| A9Q28YTLYREO7| 2760| 3|
    Music|A2U49LUUY4IKQQ| 1258| 4|
    Music|A1GN8UJIZLCA59| 1154| 5|
    Music|A2NJO6YE954DBH| 1128| 6|
    Music|A1J5KCZC8CMW9I| 1031| 7|
    Music|A3MOF5KF93Q6WE| 989| 8|
    Music| AXFI7TAWD6H6X| 814| 9|
    Music|A38U2M9OAEJAXJ| 780| 10|
  Software | AK9MWTH6LJF64|
                                1
  Software | A1EIVBXG3RD150 |
                                1
                             1
  Software | A39UZ9VVRJW4P8 |
                             1 1
  Software|A3D5ICIQ8STPCH|
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                               1|
  Software A36T3O4TIC1YDQ
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Software|A1T6PXM2M3N84A|
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Software|A1F8RIBFWRYM3Y|
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                         1| 1|
Software|A23DFB8IUTIZM0|
Software|A1XQB8IU7S8WEU|
                          1| 1|
                          1| 1|
Software|A2I0ZWBVR05750|
Software| A37UFPGDSSMEV|
                          1| 1|
Software|A36NHJPD24UMGJ|
                           1| 1|
Software|A183K8JAQJW8LZ|
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