# Desafio 5

```
library(RSQLite)
```

```
Warning: pacote 'RSQLite' foi compilado no R versão 4.4.3
```

```
db = dbConnect(SQLite(), 'disco.db')
db
```

```
<SQLiteConnection>
  Path: C:\Users\rseit\OneDrive\Área de Trabalho\Labs ME315\Desafio5\disco.db
  Extensions: TRUE
```

```
dbListTables(db)
```

```
 [1] "albums"          "artists"         "customers"       "employees"
 [5] "genres"          "invoice_items"   "invoices"        "media_types"
 [9] "playlist_track"  "playlists"       "sqlite_sequence" "sqlite_stat1"
[13] "tracks"
```

```
dbListFields(db,'albums')
```

```
[1] "AlbumId"  "Title"    "ArtistId"
```

```
album_db = dbGetQuery(db,'SELECT * FROM albums')
head(album_db)
```

```
  AlbumId                                 Title ArtistId
1       1 For Those About To Rock We Salute You        1
2       2                   Balls to the Wall        2
3       3                   Restless and Wild        2
4       4                   Let There Be Rock        1
5       5                         Big Ones        3
6       6                  Jagged Little Pill        4
```

```
dim(album_db)
```

```
[1] 347   3
```

```
sql = 'SELECT trackid, name, composer, unitprice FROM tracks ORDER BY name'
res = dbGetQuery(db, sql)
head(res)
```

```
  TrackId                                                 Name
1    3027                                                 "40"
2    2918                                                  "?"
3    3412 "Eine Kleine Nachtmusik" Serenade In G, K. 525: I. Allegro
4     109                                               #1 Zero
5    3254                                              #9 Dream
6     602                                        'Round Midnight
                        Composer UnitPrice
1                             U2      0.99
2                           <NA>      1.99
3           Wolfgang Amadeus Mozart      0.99
4 Cornell, Commerford, Morello, Wilk      0.99
5                           <NA>      0.99
6                     Miles Davis      0.99
```

```
sql = 'SELECT city FROM customers ORDER BY city'

ex3a = dbGetQuery(db, sql)
head(ex3a)
```

```
       City
1 Amsterdam
2 Bangalore
3    Berlin
4    Berlin
5  Bordeaux
6    Boston
```

```
dim(ex3a)
```

```
[1] 59  1
```

```
sql = 'SELECT DISTINCT city FROM customers ORDER BY city'

ex3b = dbGetQuery(db, sql)
head(ex3b)
```

```
       City
1 Amsterdam
2 Bangalore
3    Berlin
4  Bordeaux
5    Boston
6  Brasília
```

```
dim(ex3b)
```

```
[1] 53  1
```

```
sql = 'SELECT name, albumid FROM tracks WHERE albumid=1'

album = dbGetQuery(db, sql)
head(album)
```

```
                                  Name AlbumId
1 For Those About To Rock (We Salute You)       1
2                  Put The Finger On You       1
3                        Let's Get It Up       1
4                     Inject The Venom       1
5                           Snowballed       1
6                           Evil Walks       1
```

```
sql = 'SELECT name, albumid, mediatypeid FROM tracks WHERE mediatypeid = 1 OR mediatypeid = 2 OR
ccomplex = dbGetQuery(db, sql)
head(ccomplex)
```

```
                                                 Name AlbumId
1                                                 "40"     239
2 "Eine Kleine Nachtmusik" Serenade In G, K. 525: I. Allegro     281
3                                           #1 Zero      11
4                                          #9 Dream     255
5                                    'Round Midnight      48
  MediaTypeId
1           1
2           1
3           1
4           2
5           1
```

```
sql = 'SELECT trackid, name, albumid FROM tracks WHERE albumid IN (SELECT albumid FROM albums WH

artista = dbGetQuery(db, sql)
head(artista)
```

```
  TrackId                   Name AlbumId
1     149          Black Sabbath      16
2     150            The Wizard      16
3     151 Behind The Wall Of Sleep      16
4     152                 N.I.B.      16
5     153             Evil Woman      16
6     154        Sleeping Village      16
```

```
sql = "SELECT trackid, name FROM tracks WHERE name GLOB '?ere*'"
dbGetQuery(db, sql)[1:5,]
```

```
  TrackId                  Name
1     324                Pereré
2    1132              Serenity
3    1452 Were Do We Go From Here
4    1740                Sereia
5    2198               Jeremy
```

```
sql = "SELECT trackid, name FROM tracks WHERE name GLOB '*[0-9]*'"
dbGetQuery(db, sql)[1:5,]
```

```
  TrackId                    Name
1     109                  #1 Zero
2     122            20 Flight Rock
3     132         13 Years Of Grief
4     343 Communication Breakdown(2)
5     347 Communication Breakdown(3)
```

```
sql = 'SELECT albumid, COUNT(trackid) FROM tracks GROUP BY albumid'
dbGetQuery(db, sql)[1:5,]
```

```
  AlbumId COUNT(trackid)
1       1             10
2       2              1
3       3              3
4       4              8
5       5             15
```

```
sql = 'SELECT albumid, COUNT(trackid) FROM tracks WHERE albumid = 1 GROUP BY albumid'
dbGetQuery(db, sql)
```

```
  AlbumId COUNT(trackid)
1       1             10
```

```
sql = 'SELECT trackid, name, title FROM tracks INNER JOIN albums ON tracks.albumid = albums.albu

dbGetQuery(db, sql)[1:5,]
```

```
  TrackId                                  Name
1       1 For Those About To Rock (We Salute You)
2       6                  Put The Finger On You
3       7                        Let's Get It Up
4       8                     Inject The Venom
5       9                           Snowballed
                                Title
1 For Those About To Rock We Salute You
2 For Those About To Rock We Salute You
3 For Those About To Rock We Salute You
4 For Those About To Rock We Salute You
5 For Those About To Rock We Salute You
```