

Desafio 5

AUTHOR

Felipe Basilio da Silva

```
library(RSQLite)
```

```
db = dbConnect(SQLite(), "disco.db") # exemplo
```

```
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"
```

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

	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(albumdb)
```

```
[1] 347 3
```

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

	TrackId	Name	Composer
1	1	For Those About To Rock (We Salute You)	Angus Young, Malcolm Young, Brian Johnson
2	2	Balls to the Wall	<NA>
3	3	Fast As a Shark	
4	4	Restless and Wild	
5	5	Princess of the Dawn	
6	6	Put The Finger On You	

```

3 F. Baltes, S. Kaufman, U. Dirksneider & W. Hoffman
4 F. Baltes, R.A. Smith-Diesel, S. Kaufman, U. Dirksneider & W. Hoffman
5 Deaffy & R.A. Smith-Diesel
6 Angus Young, Malcolm Young, Brian Johnson
UnitPrice
1 0.99
2 0.99
3 0.99
4 0.99
5 0.99
6 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

```
dbGetQuery(db, 'SELECT name, albumid FROM tracks WHERE albumid=1')
```

	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
7           C.O.D.         1
8           Breaking The Rules 1
9           Night Of The Long Knives 1
10          Spellbound     1

```

```

sql = paste('SELECT name, albumid, mediatypeid FROM tracks',
'WHERE mediatypeid IN (1, 2)',
'ORDER BY name LIMIT 5')
dbGetQuery(db, sql)

```

	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	2
3	1
4	2
5	1

```

sql = paste('SELECT trackid, name, albumid FROM tracks',
'WHERE albumid IN',
'(SELECT albumid FROM albums WHERE artistid==12)',
'LIMIT 5')
dbGetQuery(db, sql)

```

	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

```

sql = "SELECT trackid, name FROM tracks WHERE name GLOB '?ere*'"
ex4 = dbGetQuery(db, sql)
ex4

```

	TrackId	Name
1	324	Pererê
2	1132	Serenity
3	1452	Were Do We Go From Here
4	1740	Sereia
5	2198	Jeremy
6	2479	Here's To The Atom Bomb
7	2791	Hereditário
8	3042	Here I Am (Come And Take Me)
9	3133	Here I Go Again

```
sql = "SELECT trackid, name FROM tracks WHERE name GLOB '*[0-9]*'"
ex5 = dbGetQuery(db, sql)
head(ex5)
```

	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)
6	348	I Can't Quit You Baby(2)

```
sql = 'SELECT albumid, COUNT(trackid) FROM tracks GROUP BY albumid'
ex6 = dbGetQuery(db, sql)
head(ex6)
```

	AlbumId	COUNT(trackid)
1	1	10
2	2	1
3	3	3
4	4	8
5	5	15
6	6	13

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

	AlbumId	COUNT(trackid)
1	1	10

```
sql = paste('SELECT trackid, name, title FROM tracks',
'INNER JOIN albums ON albums.albumid=tracks.albumid')
ex7 = dbGetQuery(db, sql)
head(ex7)
```

	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
6	10	Evil Walks

	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
6	For Those About To Rock We Salute You

