MySQLcon

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```r
library(RMariaDB)
```

```
## Warning: package 'RMariaDB' was built under R version 4.3.3
```

```r
library(dplyr)
```

```
## Warning: package 'dplyr' was built under R version 4.3.3
```

```
##
## Attaching package: 'dplyr'
```

```
## The following objects are masked from 'package:stats':
##
##     filter, lag
```

```
## The following objects are masked from 'package:base':
##
##     intersect, setdiff, setequal, union
```

```r
library(dbplyr)
```

```
## Warning: package 'dbplyr' was built under R version 4.3.3
```

```
##
## Attaching package: 'dbplyr'
```

```
## The following objects are masked from 'package:dplyr':
##
##     ident, sql
```

```r
#method for loading csv file to database>>>
# I created a table 'arxiv' and loaded the csv using command prompt by
# LOAD DATA LOCAL INFILE 'C:/xampp/mysql/data/arxiv_150/arxiv_articles.csv'  INTO TABLE arxiv FIELDS TE

connection <- dbConnect(RMariaDB::MariaDB(),
                        dsn = "arxiv-connection",
                        Server = "localhost",
                        dbname = "arxiv_150",
                        user = "root"
                        )
```

```r
#shows tables
dbListTables(connection)
```

```
## [1] "arxiv"
```

```r
#shows fields
dbListFields(connection, "arxiv")
```

```
## [1] "col"      "Title"    "Author"   "Subject"  "Abstract" "Meta"
```

```r
#showing all data
arxiv_dta <- dbGetQuery(connection, "SELECT * FROM arxiv_150.arxiv")

#seek
glimpse(arxiv_dta)
```

```
## Rows: 157
## Columns: 6
## $ col      <int> 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18~
## $ Title    <chr> "Seamless Human Motion Composition with Blended Positional En~
## $ Author   <chr> "German Barquero, Sergio Escalera, Cristina Palmero", "Jiangu~
## $ Subject  <chr> "Computer Vision and Pattern Recognition (cs.CV)", "Artificia~
## $ Abstract <chr> "Conditional human motion generation is an important topic wi~
## $ Meta     <chr> "Fri, 23 Feb 2024 18:59:40 UTC (15,139 KB)", "Fri, 23 Feb 202~
```

```r
#selected fields of table
arxiv_sel <- dbGetQuery(connection, "SELECT Title, Abstract FROM arxiv_150.arxiv")
arxiv_sel[c(1,2),]
```

```
##                                                                       Title
## 1        Seamless Human Motion Composition with Blended Positional Encodings
## 2 AgentOhana: Design Unified Data and Training Pipeline for Effective Agent Learning
##
## 1 Conditional human motion generation is an important topic with many applications in virtual reality
## 2
```

```r
arxiv_sel[c(4,2),]
```

```
##                                                                       Title
## 4         Gen4Gen: Generative Data Pipeline for Generative Multi-Concept Composition
## 2 AgentOhana: Design Unified Data and Training Pipeline for Effective Agent Learning
##
## 4 Recent text-to-image diffusion models are able to learn and synthesize images containing novel, pe
## 2
```

```r
#getting all data using SELECT * FROM
sqlQuery <- "SELECT Author, Meta FROM arxiv_150.arxiv"
as_tibble(dbGetQuery(connection, sqlQuery))
```

```
## # A tibble: 157 x 2
##    Author                                                       Meta
##    <chr>                                                        <chr>
##  1 "German Barquero, Sergio Escalera, Cristina Palmero"         Fri,~
##  2 "Jianguo Zhang, Tian Lan, Rithesh Murthy, Zhiwei Liu, Weiran Yao, Junt~ Fri,~
##  3 "Yuejiang Liu, Alexandre Alahi"                              Fri,~
##  4 "Chun-Hsiao Yeh, Ta-Ying Cheng, He-Yen Hsieh, Chuan-En Lin, Yi Ma, And~ Fri,~
##  5 "Emanuel Herrendorf, Christian Komusiewicz, Nils Morawietz, Frank Somm~ Fri,~
##  6 "Xuyang Li, Hamed Bolandi, Mahdi Masmoudi, Talal Salem, Nizar Lajnef, ~ Fri,~
##  7 "Kinjal Basu, Ibrahim Abdelaziz, Subhajit Chaudhury, Soham Dan, Maxwel~ Fri,~
##  8 "Abolfazl Younesi, Mohsen Ansari, MohammadAmin Fazli, Alireza Ejlali, ~ Fri,~
##  9 "Hanxiao Jiang, Binghao Huang, Ruihai Wu, Zhuoran Li, Shubham Garg, Ho~ Fri,~
## 10 "Majid Behbahani, Mina Dalirrooyfard, Elaheh Fata, Yuriy Nevmyvaka"     Fri,~
## # i 147 more rows
```

```r
#inserting a data
query <- "INSERT INTO arxiv(col, Title, Author, Subject, Abstract, Meta)
          VALUES ('', 'Database-arxiv', 'Darlene Lapso', 'R-Databases Integration',
          'Loading and importing csv file using cmd and connect it to database/mysql.', 'March 9, 2023')

query_result <- dbSendQuery(connection, query)

dbClearResult(query_result)


arxiv_updta <- dbGetQuery(connection, 'SELECT * FROM
                          arxiv_150.arxiv')
#the inserted data has been multipled since I entered it multiple times.:(

arxiv_seeUp <- dbGetQuery(connection, "SELECT Title, Author, Subject, Meta FROM arxiv_150.arxiv")
(arxiv_seeUp <- tail(arxiv_seeUp, n = 5)) #checking the updated data
```

```
##              Title        Author                 Subject           Meta
## 154 Database-arxiv Darlene Lapso R-Databases Integration March 9, 2023
## 155 Database-arxiv Darlene Lapso R-Databases Integration March 9, 2023
## 156 Database-arxiv Darlene Lapso R-Databases Integration March 9, 2023
## 157 Database-arxiv Darlene Lapso R-Databases Integration March 9, 2023
## 158 Database-arxiv Darlene Lapso R-Databases Integration March 9, 2023
```

```r
#saving file as csv
write.csv(arxiv_updta, file = "arxiv_150.csv", row.names = FALSE)


dbDisconnect(connection)
```