

# PSTAT 10 Worksheet 8

Due 7/19/22

For this worksheet, we need the following packages along with a connection to the Chinook database.

```
library(RSQLite)
library(sqldf)
library(DBI)
chinook_db <- dbConnect(SQLite(), "../Chinook_Sqlite.sqlite")
```

## Problem 1

1. What is the total length in minutes of all tracks with GenreId = 2? Answer with a query returning the following:

```
##   GenreId minutes
## 1      2      632
```

2. Using a join, add the name of the genre to the above query.

```
##   Name GenreId minutes
## 1 Jazz      2      632
```

3. Using a group by, find this information for all genres. I've provided just the first 5 records of the output.

```
##           Name GenreId minutes
## 1         Rock      1    6137
## 2         Jazz      2     632
## 3         Metal      3    1930
## 4 Alternative & Punk  4    1296
## 5   Rock And Roll      5      26
```

## Problem 2

Who is the support rep of the customer named Heather Leacock? Answer this by returning the following relation using a single query. Make sure your field names match mine by using aliases.

```
##   RepId RepFirstName RepLastName CustomerId CustFirstName CustLastName
## 1     4    Margaret      Park         22      Heather      Leacock
```

### Problem 3: Distinct

The following command is often useful: `distinct` selects records with unique field values from a table. For example, here is how we can get the unique prices of each track.

```
dbGetQuery(chinook_db, "select distinct UnitPrice from Track")
```

```
##      UnitPrice
## 1          0.99
## 2          1.99
```

We can see tracks cost each 0.99 or 1.99, two different values. To get the count directly we can use the following

```
dbGetQuery(chinook_db, "select count(distinct UnitPrice) from Track")
```

```
##      count(distinct UnitPrice)
## 1                             2
```

1. How many difference countries are the customers from?
2. Retrieve the unique titles of the employees.
3. The following determines how many unique genres there are. Was `distinct` necessary here? Explain.

```
dbGetQuery(chinook_db, "select count(distinct GenreId) from Genre")
```

```
##      count(distinct GenreId)
## 1                             25
```