

ACCESSING A MySQL DATABASE USING WINDOWS COMPUTERS

Launch Secure CRT

You may be asked to choose whether to encrypt your data or not. Since this is not a production database, it is probably OK not to encrypt it. In that case, choose the **Without a configuration passphrase** option.

Click on Mallard in the Sessions list

File > Connect to start the connection process.

Enter your Auburn user ID, click OK

Enter your Auburn password, click OK

You should now be in the terminal window (all black) with a prompt that looks something like this:

```
-bash-4.1$
```

ONCE YOU CONNECT TO MYSQL.AUBURN.EDU

Enter the following command, substituting your mysql *yourusername* where indicated

```
mysql -h mysql.auburn.edu -u yourusername -p
```

You should see this:

Enter password:

Enter your mysql password. NOTE: THE CURSOR WILL NOT MOVE WHILE YOU ENTER YOUR PASSWORD!

You should see a welcome message followed by the mysql prompt which looks like this:

```
mysql>
```

To connect to your database, enter

```
use yourdatabasename;
```

Where *yourdatabasename* is the name of the mysql database you created. Be sure to include the semicolon. You should see the message and prompt:

```
Database changed
```

```
mysql>
```

You can now enter mysql commands. Enter \h to get help. If a command gets completely messed up, enter \c to cancel the command and get back to the mysql prompt. (Go to **CREATE TABLES AND LOAD DATA** on the next page to actually create your database.) To exit mysql, enter

```
exit
```

File > Disconnect to leave Mallard.

File > Quit to leave SecureCRT.

CREATE TABLES AND LOAD DATA

Download the following files from the class Canvas website:

MySQL Setup File.txt

Open the file in Notepad.

Copy and paste the content of this file into the mysql environment. DO NOT use ctrl-V to Paste. It does not work. You will need choose Paste from the Edit menu.

You can now execute SQL commands!

Try these:

Show all the data in the CUSTOMER table.

Select * from CUSTOMER;

Show the email addresses of people whose last name is Miller.

Select EmailAddress from CUSTOMER where LastName = "Miller";

Show the services available for under \$7.00.

Select ServiceDescription from SERVICE where UnitPrice < 7.00;

Sum up the Extended Price values in the INVOICE_ITEM table for invoice 2017001. What value does it correspond to in the INVOICE table?

Select SUM(ExtendedPrice) from INVOICE_ITEM where InvoiceNumber = 2017001;

The answer is \$158.50. It is the Subtotal in the INVOICE table.

Show all the data in the CUSTOMER table where the customer has an INVOICE total amount (TotalAmount) > 20.

Select * from CUSTOMER where CustomerID IN (Select CustomerID from INVOICE where INVOICE.TotalAmount > 20.00);

Show the names of the services for which charges appear on invoice 2017001.

Select SERVICE.ServiceDescription from SERVICE, INVOICE_ITEM where INVOICE_ITEM.ServiceID = SERVICE.ServiceID and INVOICE_ITEM.InvoiceNumber = 2017001;

Who is the customer associated with invoice 2017003?

Select CUSTOMER.FirstName, CUSTOMER.LastName from CUSTOMER, INVOICE where CUSTOMER.CustomerID = INVOICE.CustomerID and INVOICE.InvoiceNumber = 2017003;

How many times has Bruce LeCat been invoiced?

Select Count(InvoiceNumber) from CUSTOMER, INVOICE where CUSTOMER.LastName = "LeCat" and CUSTOMER.FirstName = "Bruce" and CUSTOMER.CustomerID = INVOICE.CustomerID;

What is the name and email address of the person whose invoice has the largest total charge?

Select CUSTOMER.LastName, MAX(INVOICE.TotalAmount) from CUSTOMER, INVOICE where CUSTOMER.CustomerID = INVOICE.CustomerID;

What is the average total charge for customers?

```
Select AVG(TotalAmount) from INVOICE;
```

What is the average total charge for each customer?

```
Select AVG(TotalAmount) from INVOICE GROUP BY CustomerID;
```

How many blouses have been cleaned?

```
Select COUNT(*) from INVOICE_ITEM, SERVICE where ServiceDescription="Blouse" and  
INVOICE_ITEM.ServiceID=SERVICE.ServiceID;
```

How many dress skirts have been cleaned?

```
Select COUNT(*) from INVOICE_ITEM, SERVICE where ServiceDescription="Dress Skirt" and  
INVOICE_ITEM.ServiceID=SERVICE.ServiceID;
```

What is Bruce LeCat's average invoice total charge?

```
Select AVG(INVOICE.TotalAmount) from CUSTOMER, INVOICE where CUSTOMER.LastName = "LeCat" and  
CUSTOMER.FirstName = "Bruce" and CUSTOMER.CustomerID = INVOICE.CustomerID;
```

Try a command that produces the names of customers in alphabetical order (ORDER BY).

```
Select LastName from CUSTOMER ORDER BY LastName;
```

Count the number of invoices for each customer.

```
Select Count(InvoiceNumber) from CUSTOMER, INVOICE where CUSTOMER.CustomerID = INVOICE.CustomerID GROUP  
BY INVOICE.CustomerID;
```

Modify the command you just wrote to include customer names.

```
Select LastName, FirstName, Count(InvoiceNumber) from CUSTOMER, INVOICE where CUSTOMER.CustomerID =  
INVOICE.CustomerID GROUP BY INVOICE.CustomerID;
```

Make up your own command!