

# **SQL WORKSHOP**

September 9, 2014

# AGENDA


1. Install MySQL workbench
2. Setup connection and access iSchool MySQL server
3. Try a few SQL queries

# MySQL Workbench

Please download from -

<http://dev.mysql.com/downloads/workbench/>

Depending on OS version, click on Download



**MySQL Workbench 6.1.7**

Select Platform:

Mac OS X

**Mac OS X (x86, 32-bit), DMG Archive**

(mysql-workbench-community-6.1.7-osx-i686.dmg)

6.1.7 50.7M

MD5: a01e6d0b83b1a9c9e5cd39a802be4e40 | [Signature](#)

[Looking versions](#)

[Download](#)

# MySQL Workbench

**Login »**

using my Oracle Web account



**Sign Up »**

for an Oracle Web account



MySQL.com is using Oracle SSO for authentication. If you already have an Oracle Web account, click the Login link. Otherwise, you can sign up for a free account by clicking the Sign Up link and following the instructions.


**No thanks, just start my download.**

# MySQL Workbench

MySQL Connections  

ISchool MySQL


 rahul\_jverma  n/a


 3306 ischool.berkeley.edu:3306


Click on the '+' sign to go to the connection page


Filter connections


Shortcuts


 MySQL Doc Library


 MySQL Utilities


 Database Migration

 MySQL Bug Reporter

 Workbench Blogs

 Planet MySQL

 Workbench Forum

 Scripting Shell

Models   

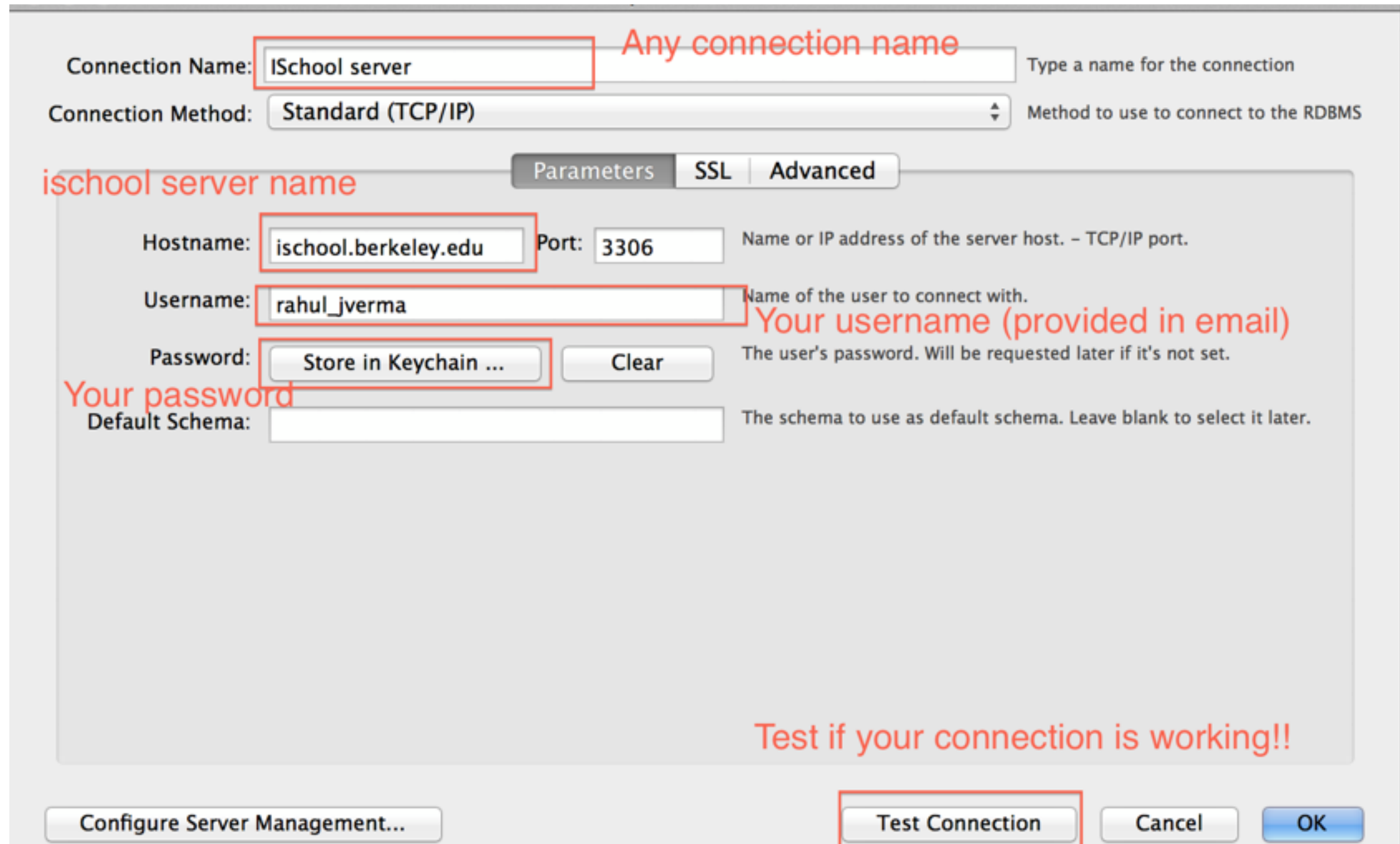
 sakila\_full

 ...nts/Resources/.../SharedSupport

 --

 20 Jun 14, 12:24

# MySQL Workbench



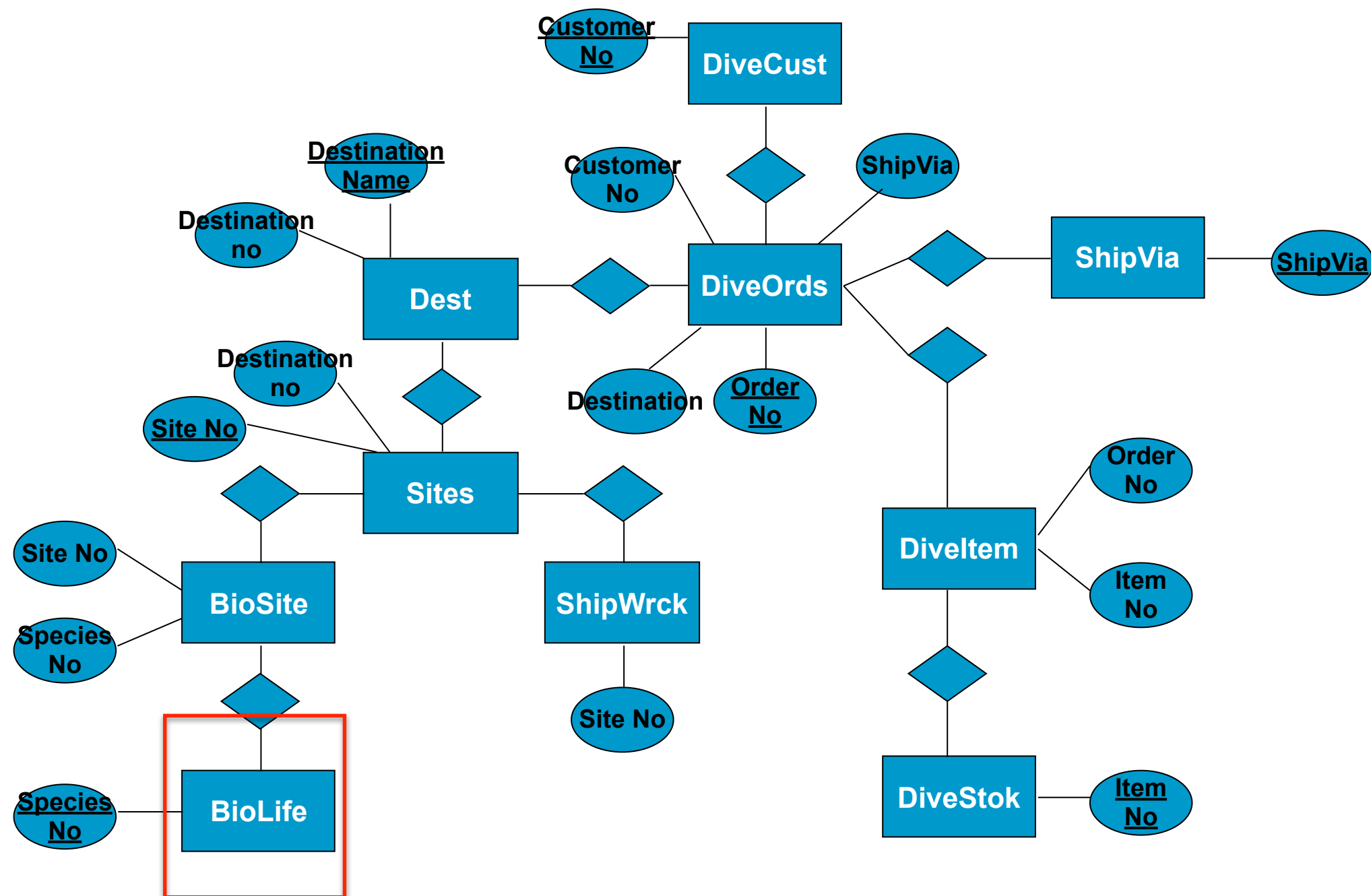
The image shows the MySQL Workbench 'New Connection' dialog box. It has a title bar and a main content area with several tabs: 'Parameters', 'SSL', and 'Advanced'. The 'Parameters' tab is selected. The dialog contains the following fields and controls:

- Connection Name:** A text box containing 'ISchool server'. A red box highlights this field, and a red annotation 'Any connection name' points to it.
- Connection Method:** A dropdown menu showing 'Standard (TCP/IP)'. A red box highlights this dropdown, and a red annotation 'Any connection name' points to it.
- Hostname:** A text box containing 'ischool.berkeley.edu'. A red box highlights this field, and a red annotation 'ischool server name' points to it.
- Port:** A text box containing '3306'.
- Username:** A text box containing 'rahul\_jverma'. A red box highlights this field, and a red annotation 'Your username (provided in email)' points to it.
- Password:** A text box containing 'Store in Keychain ...'. A red box highlights this field, and a red annotation 'Your password' points to it.
- Clear:** A button next to the password field.
- Default Schema:** An empty text box.
- Test Connection:** A button at the bottom right, highlighted with a red box.
- Cancel:** A button next to the 'Test Connection' button.
- OK:** A button next to the 'Cancel' button.

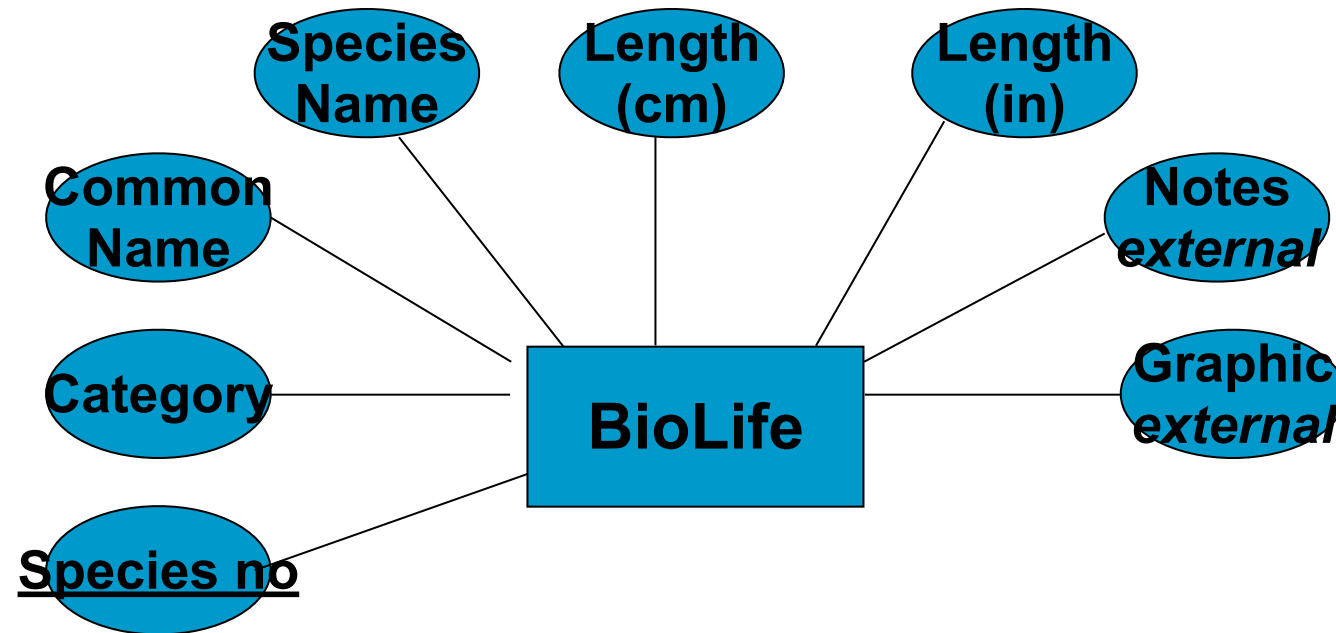
Red annotations are present throughout the dialog, providing context for the user input. The 'Test Connection' button is highlighted with a red box, and a red annotation 'Test if your connection is working!!' points to it.

# Let's try some queries

What is the length (in centimeters) of a Spotted Eagle Ray?



What is the length (in centimeters) of Spotted Eagle Ray?

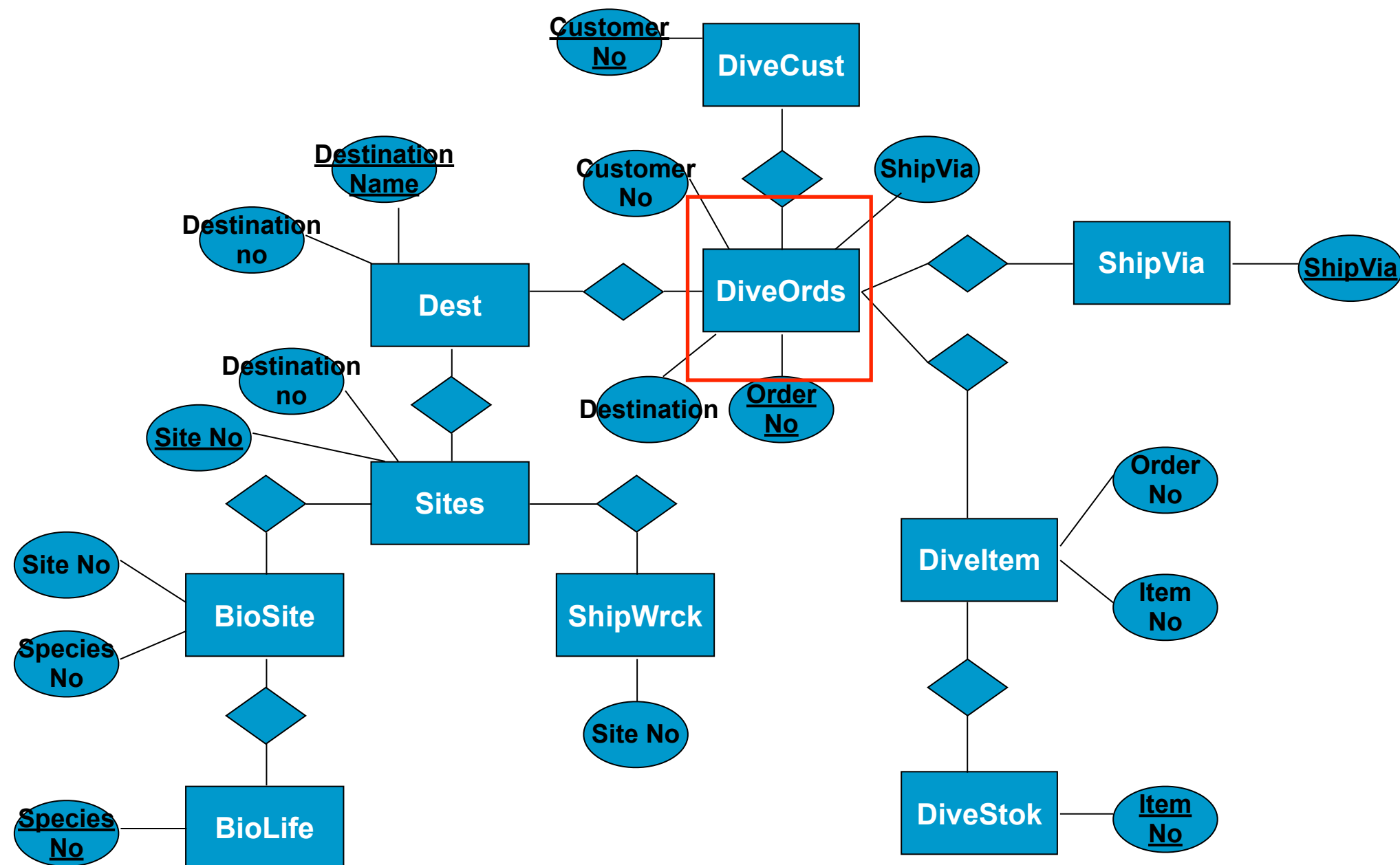


```
SELECT BIOLIFE.Length_cm
FROM BIOLIFE
WHERE
BIOLIFE.Common_Name="Spotted Eagle Ray"
```

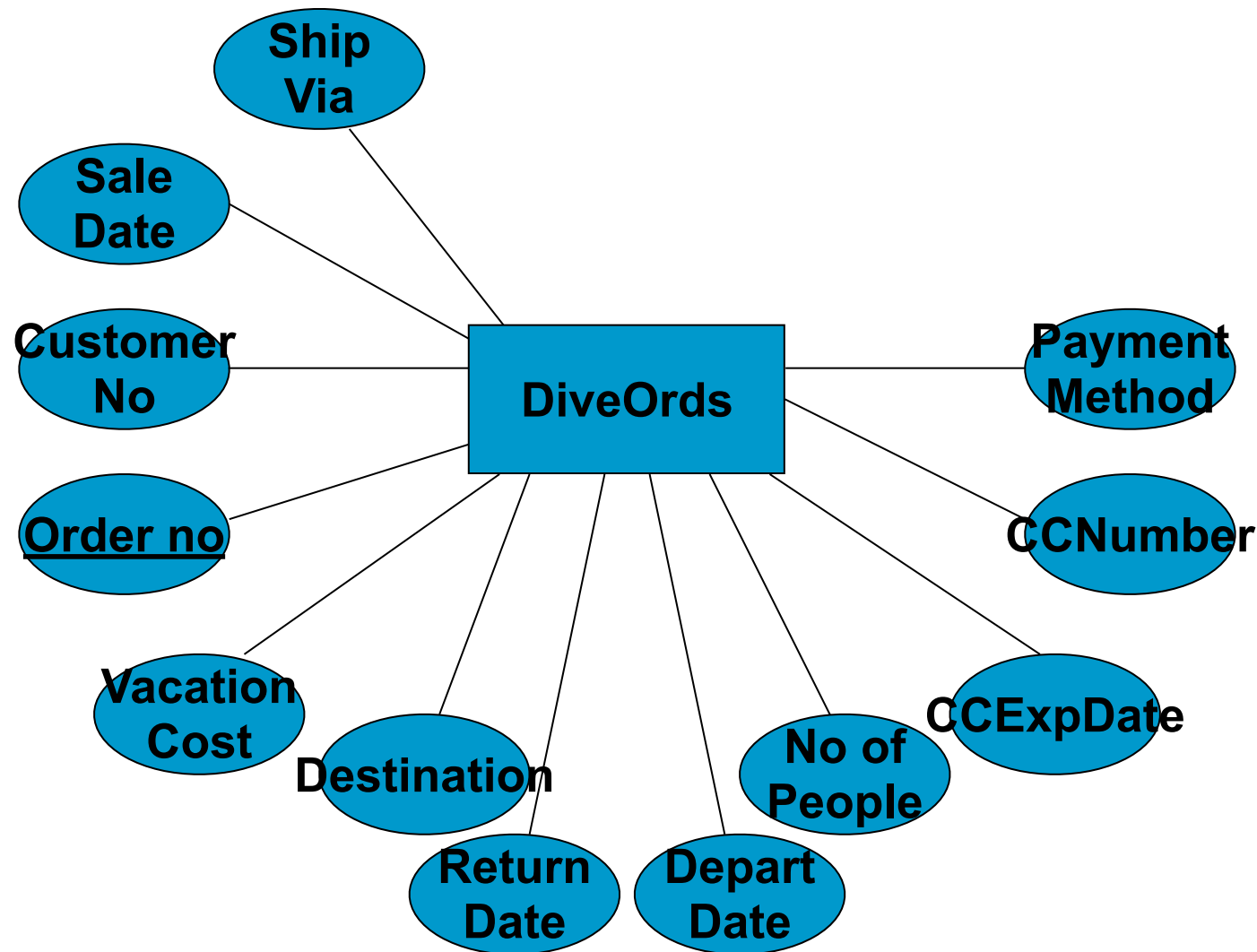


# Sample query

Which destination has the highest number of dive orders?



Which destination has the highest number of dive orders?

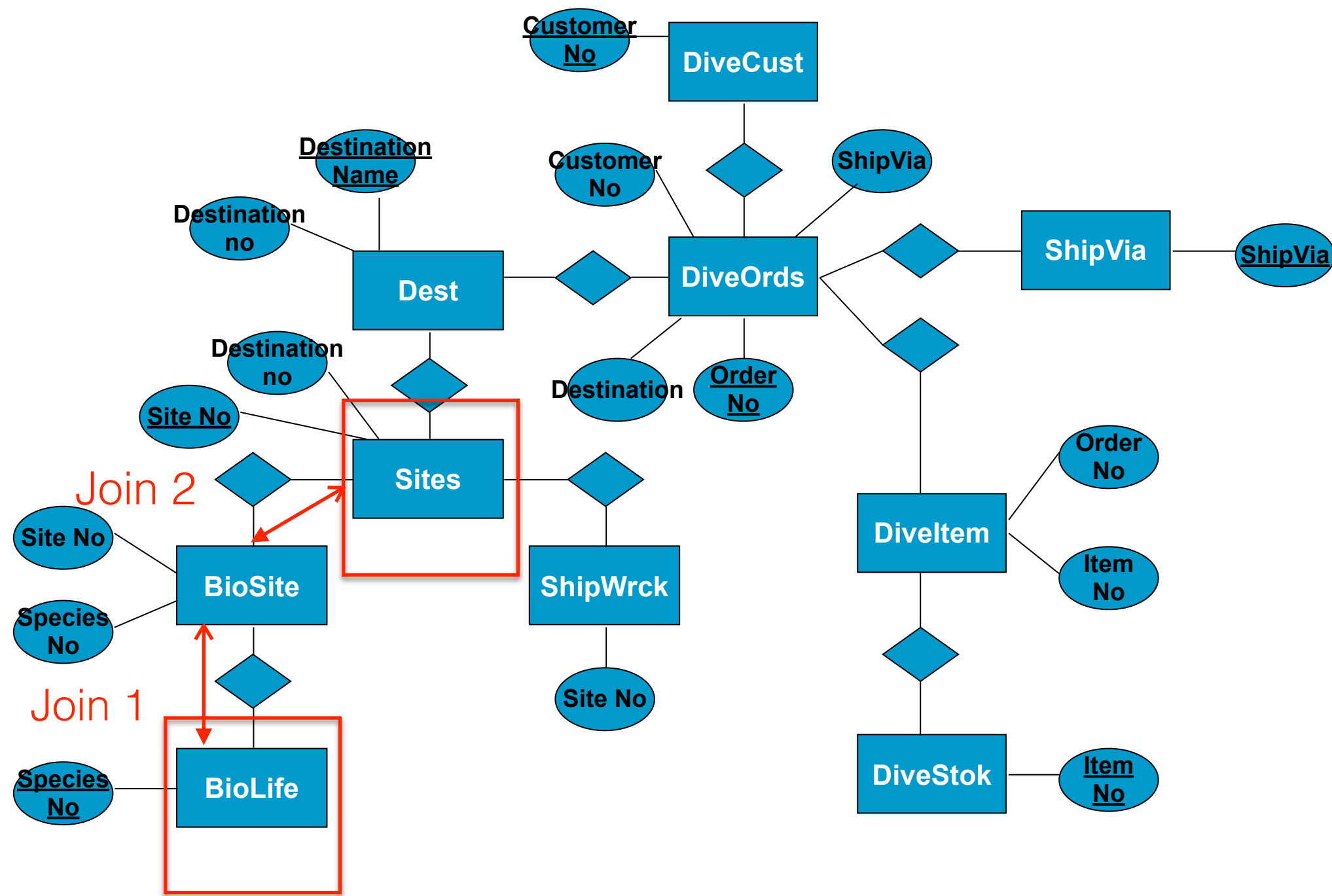


```
SELECT DIVEORDS.Destination, COUNT(*)  
FROM DIVEORDS  
GROUP BY DIVEORDS.Destination
```

\*\*\* Please note, COUNT, SUM, AVERAGE ... etc are group by operations\*\*\*

# Sample query

In which **site(s)** might you find a Bat Ray?



# SQL query

In which **site(s)** might you find a Bat Ray?

```
SELECT SITES.Site_Name  
FROM BIOLIFE, BIOSITE, SITES  
WHERE  
BIOLIFE.Common_Name="Bat Ray"  
AND BIOLIFE.Species_No=BIOSITE.Species_No  
AND BIOSITE.Site_No=SITES.Site_No
```

## *Appendix*

### **HOW TO:**

### **Connect MySQL Database from the Command Line**

Using a SSH client

- Mac OS/Linux User: Terminal
- Windows User: PuTTY

```
>ssh username@ischool.berkeley.edu
```

```
>mysql -p username
```

```
mysql>
```

# *Appendix*

## Tips for Recording output in Command Line

```
mysql> \T OUTPUT
```

Logging to file 'OUTPUT'

```
-> select * from SITES;
```

```
mysql> \t
```

Outfile disabled.

```
mysql> \q
```

Bye

harbinger:~ --> more OUTPUT

<OPEN ANOTHER TAB>

```
:~$ scp username@ischool.berkeley.edu:OUTPUT /some/local/  
directory
```