

## Week 1

List of commands-----

To create a database

```
mysql>Create database Jan2018Hr;
```

To Mount a database

```
mysql>Use Jan2018Hr;
```

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Now run the script to create and populate the objects in the database

- Open the script [text file from course website]
- select [block] all the lines in the script
- select File
- select Copy

Point the mouse [focus] on the Mysql command line

```
mysql>
```

- Right click the mouse
- paste operation will take place and the execution of the script will begin

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To display the table objects created

```
mysql> show tables;
```

```
+-----+  
| Tables_in_jan2018hr |  
+-----+  
| countries            |  
| departments          |  
| employees            |  
| job_grades           |  
| job_history           |  
| jobs                 |  
| locations            |  
| regions              |  
+-----+  
8 rows in set (0.00 sec)
```

To display the table objects structure

```
mysql> describe countries;
```

Field	Type	Null	Key	Default	Extra
Country_Id	char(2)	NO	PRI	NULL	
Country_Name	varchar(40)	YES		NULL	
Region_Id	decimal(2,0)	YES	MUL	NULL	

3 rows in set (0.01 sec)

```
mysql> describe employees;
```

Field	Type	Null	Key	Default	Extra
Employee_id	decimal(6,0)	NO	PRI	NULL	
First_Name	varchar(20)	YES		NULL	
Last_Name	varchar(25)	NO		NULL	
Email	varchar(20)	YES		NULL	
Phone_Number	varchar(20)	YES		NULL	
Hire_Date	date	NO		NULL	
Job_Id	varchar(10)	YES		NULL	
Salary	decimal(8,2)	YES		NULL	
Commission_Pct	decimal(2,2)	YES		NULL	
Manager_Id	decimal(6,0)	YES		NULL	
Department_Id	decimal(4,0)	YES	MUL	NULL	

11 rows in set (0.00 sec)

```
mysql> show tables;
```

Tables_in_jan2018hr
countries
departments
employees
job_grades
job_history
jobs
locations
regions

8 rows in set (0.00 sec)

Q1. Display the information about countries that we have in the database.

```
mysql> select *
-> from countries;
```

Country_Id	Country_Name	Region_Id
CA	Canada	2
DE	Germany	1
UK	United Kingdom	1
US	United States of America	2

4 rows in set (0.00 sec)

```
mysql> desc countries;
```

Field	Type	Null	Key	Default	Extra
Country_Id	char(2)	NO	PRI	NULL	
Country_Name	varchar(40)	YES		NULL	
Region_Id	decimal(2,0)	YES	MUL	NULL	

3 rows in set (0.02 sec)

Q2. Display only the country names that we have in the database.

```
mysql> select country_name
-> from countries;
```

country_name
Canada
Germany
United Kingdom
United States of America

4 rows in set (0.00 sec)

Q3. Same as Q2 but using Aliases.

```
mysql> select country_name Name
-> from countries;
```

Name
Canada
Germany

United Kingdom
United States of America

4 rows in set (0.00 sec)

Q4. Display the names of employees working in the company.

mysql> show tables;

Tables_in_jan2018hr
countries
departments
employees
job_grades
job_history
jobs
locations
regions

8 rows in set (0.00 sec)

mysql> describe employees;

Field	Type	Null	Key	Default	Extra
Employee_id	decimal(6,0)	NO	PRI	NULL	
First_Name	varchar(20)	YES		NULL	
Last_Name	varchar(25)	NO		NULL	
Email	varchar(20)	YES		NULL	
Phone_Number	varchar(20)	YES		NULL	
Hire_Date	date	NO		NULL	
Job_Id	varchar(10)	YES		NULL	
Salary	decimal(8,2)	YES		NULL	
Commission_Pct	decimal(2,2)	YES		NULL	
Manager_Id	decimal(6,0)	YES		NULL	
Department_Id	decimal(4,0)	YES	MUL	NULL	

11 rows in set (0.00 sec)

mysql> select last\_name Last, first\_name First  
-> from employees;

Last	First
King	Steven
Kochhar	Neena
Hunold	Alexander

Ernst	Bruce
Lorentz	Diana
Mourgos	Kevin
Rajs	Trenna
Davies	Curtis
Matos	Randall
Vargas	Peter
Zlotkey	Eleni
Abel	Ellen
Taylor	Jonathon
Grant	Kimberely
Whalen	Jennifer
Hartstein	Michael
Fay	Pat
Higgins	Shelley
Gietz	William

```
+-----+
19 rows in set (0.00 sec)
```

Q5. Same as Q4 but now display the output in column format only.

```
mysql> Select concat(last_name," ",first_name) "List of Names"
-> from employees;
```

List of Names
King Steven
Kochhar Neena
Hunold Alexander
Ernst Bruce
Lorentz Diana
Mourgos Kevin
Rajs Trenna
Davies Curtis
Matos Randall
Vargas Peter
Zlotkey Eleni
Abel Ellen
Taylor Jonathon
Grant Kimberely
Whalen Jennifer
Hartstein Michael
Fay Pat
Higgins Shelley
Gietz William

```
+-----+
19 rows in set (0.03 sec)
```

Q6. Display the names of employees that earn more than 4000.

```
mysql> describe employees;
```

Field	Type	Null	Key	Default	Extra
Employee_id	decimal(6,0)	NO	PRI	NULL	
First_Name	varchar(20)	YES		NULL	
Last_Name	varchar(25)	NO		NULL	
Email	varchar(20)	YES		NULL	
Phone_Number	varchar(20)	YES		NULL	
Hire_Date	date	NO		NULL	
Job_Id	varchar(10)	YES		NULL	
Salary	decimal(8,2)	YES		NULL	
Commission_Pct	decimal(2,2)	YES		NULL	
Manager_Id	decimal(6,0)	YES		NULL	
Department_Id	decimal(4,0)	YES	MUL	NULL	

```
11 rows in set (0.00 sec)
```

```
mysql> select last_name Name, salary
-> from employees
-> where salary > 4000;
```

Name	salary
King	24000.00
Kochhar	17000.00
Hunold	9000.00
Ernst	6000.00
Lorentz	4200.00
Mourgos	5800.00
Zlotkey	10500.00
Abel	11000.00
Taylor	8600.00
Grant	7000.00
Whalen	4400.00
Hartstein	13000.00
Fay	6000.00
Higgins	12000.00
Gietz	8300.00

```
15 rows in set (0.03 sec)
```

Q7. Display the salary of King.

```
mysql> select last_name Name, salary
-> from employees
-> where last_name = 'king';
```

Name	salary
King	24000.00

```
+-----+-----+
| King | 24000.00 |
+-----+-----+
1 row in set (0.00 sec)
```

MySQL is not case sensitive but if it was the match could be found using functions to change the case.

Functions such as lower() – upper()

```
mysql> select last_name Name, salary
      -> from employees
      -> where lower(last_name) = 'king';
+-----+-----+
| Name | salary |
+-----+-----+
| King | 24000.00 |
+-----+-----+
1 row in set (0.00 sec)
```

```
mysql> exit;
```