



## Sheet 1

### Getting started with MySQL command prompt

**Objective:** on successful completion of this sheet, students should be able to

1. Open MySQL from command prompt.
2. Know what is the meaning of user name and password.
3. Explore the existing databases.
4. Create a sample database consists of two tables.



**Q1) Open the MySQL command prompt and list all the existing database.**

Answer)

1. Open xampp control panel from start menu and start MySQL
2. click on start menu → write **cmd**
3. In command prompt write
  - `cd\`
  - `cd xampp\mysql\bin`
  - `mysql -h "localhost" -u "root"` (h means **host** and u means **username**)
  - `show databases;`

```
Command Prompt - mysql -h "localhost" -u "root"
Microsoft Windows [Version 10.0.14393]
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C:\Users\Wael-PC>cd\

C:\>cd xampp\mysql\bin

C:\xampp\mysql\bin>mysql -h "localhost" -u "root"
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 3
Server version: 10.1.19-MariaDB mariadb.org binary distribution

Copyright (c) 2000, 2016, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]>
```

Q2) Create a database named CompanyLab1, then create the following two tables:

1. **Employee:** that contains the following fields:
  - a. **SSN:** set of 5 characters. (use char (5)).
  - b. **Name:** set of 50 characters. (use varchar (50)).]
  - c. **BDate:** of type date.
  - d. **Salary:** of type double.
  - e. **DeptNo:** set of 4 characters. (it must have the same type as a referenced field (number) in table Department).
2. **Department**
  - a. **Number:** set of 4 characters.
  - b. **Name:** set of 50 characters.
  - c. **ManagerSSN:** set of 5 characters. (it must have the same type as a referenced field (SSN) in table Employee).

Answer)

```
CREATE DATABASE CompanyLab1;
```

```
USE CompanyLab1;
```

```
CREATE TABLE Employee (  
    SSN char(5),  
    Name varchar(50),  
    BDate Date,  
    Salary double,  
    DeptNo char(4)  
);
```

```
CREATE TABLE Department(  
    Number char(4),  
    Name varchar(50),  
    ManagerSSN char(5)  
);
```

Q3) Insert the following values to the above tables

SSN	Name	BDate	Salary	DeptNo
AA526	Ahmed	1990-05-12	5000	Prod
AA656	Bassem	1991-07-25	4900	Prod
AA852	Nasser	1989-11-30	6890	Tech

Number	Name	mangerSSN
Prod	Production	AA526
Tech	Technical	AA852

Insert into Employee values ('AA526','Ahmed','1990-05-12',5000, 'prod'),  
 ('AA656', 'Bassem','1991-07-25', 4900,'Prod'),  
 ('AA852','Nasser','1989-11-30',6890, 'Tech');

Insert into Department values ('Prod','Production','AA526'),  
 ('AA656', 'Technical','AA852');

Q4) write the following queries:

- 1- **SELECT** \* **FROM** Employee;

```
MariaDB [CompanyLab1]> SELECT * FROM Employee;
+-----+-----+-----+-----+-----+
| SSN   | Name   | BDate   | Salary | DeptNo |
+-----+-----+-----+-----+-----+
| AA526 | Ahmed  | 1990-05-12 | 5000   | prod   |
| AA656 | Bassem | 1991-07-25 | 4900   | Prod   |
| AA852 | Nasser | 1989-11-30 | 6890   | Tech   |
+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

- 2- **SELECT** Name, BDate **FROM** Employee;

```
MariaDB [CompanyLab1]> SELECT Name, BDate FROM Employee;
+-----+-----+
| Name   | BDate   |
+-----+-----+
| Ahmed  | 1990-05-12 |
| Bassem | 1991-07-25 |
| Nasser | 1989-11-30 |
+-----+-----+
3 rows in set (0.00 sec)
```

- 3- **SELECT** E.Name **AS** 'Employee Name', D.Name **AS** 'Department Name'  
**FROM** Employee E, Department D **WHERE** E. DeptNo=D.Number;

```
MariaDB [CompanyLab1]> SELECT E.Name as 'Employee Name', D.Name as 'Department Name' FROM Employee E, Department D WHERE E. DeptNo=D.Number;
```

Employee Name	Department Name
Ahmed	Production
Bassem	Production

2 rows in set (0.00 sec)