

README

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CSE-5330-002

Answer 1 → Tools used VS Code & Node package manager.

Instructions to run the code :

1. Install dependencies :

```
npm i mysql
```

2. Run insert.js file

```
node insert.js [table_name]

# Example
node insert.js Project

# OR
node insert.js
# This will ask to insert the table name
```

The screenshot shows two terminal windows side-by-side. The left window is a MySQL command-line interface with the following output:

```
mysql> show tables;
+-----+
| Tables_in_company |
+-----+
| department         |
| Employee           |
| project            |
+-----+
3 rows in set (0.02 sec)

mysql> Select * from project;
Empty set (0.01 sec)

mysql> Select * from project;
+-----+
| Pname | Pnumber | Plocation | Dnum |
+-----+
| Product X | 1 | Bellaire | 5 |
+-----+
1 row in set (0.00 sec)

mysql> Select * from project;
+-----+
| Pname | Pnumber | Plocation | Dnum |
+-----+
| Product X | 1 | Bellaire | 5 |
| Product Y | 2 | Sugar Land | 5 |
+-----+
2 rows in set (0.00 sec)

mysql>
```

The right window is a Node.js terminal running the 'node insert.js Project' command. The output is as follows:

```
>> Table: Project
>> Project Name: Product X
>> Project Number: 1
>> Project Location: Bellaire
>> Department Number: 5

>> Data successfully inserted in table: Project

>> insert data
>> Table name: Project

>> Table: Project
>> Project Name: Product Y
>> Project Number: 2
>> Project Location: Sugar Land
>> Department Number: 5

>> Data successfully inserted in table: Project

>>
```

```
mysql> Select * from Department;
+-----+-----+-----+-----+
| Dname | Dnumber | Mgr_ssn | Mgr_start_date |
+-----+-----+-----+-----+
| Sales | 2 | 123452 | 2010-02-02 |
| Development | 3 | 123456 | 2010-02-02 |
| New | 4 | 123432 | 2010-02-02 |
| New one | 5 | 12312 | 2010-02-02 |
| New department | 10 | 21321 | 2010-02-02 |
| QA | 11 | 913323708 | 2010-02-02 |
| ACA | 33 | 23324 | 2010-02-02 |
+-----+-----+-----+-----+
7 rows in set (0.00 sec)

mysql> Select * from Department;
+-----+-----+-----+-----+
| Dname | Dnumber | Mgr_ssn | Mgr_start_date |
+-----+-----+-----+-----+
| Headquarters | 1 | 55555 | 1971-06-19 |
| Sales | 2 | 123452 | 2010-02-02 |
| Development | 3 | 123456 | 2010-02-02 |
| New | 4 | 123432 | 2010-02-02 |
| New one | 5 | 12312 | 2010-02-02 |
| New department | 10 | 21321 | 2010-02-02 |
| QA | 11 | 913323708 | 2010-02-02 |
| ACA | 33 | 23324 | 2010-02-02 |
+-----+-----+-----+-----+
8 rows in set (0.00 sec)

mysql> Select * from Department;
+-----+-----+-----+-----+
| Dname | Dnumber | Mgr_ssn | Mgr_start_date |
+-----+-----+-----+-----+
| Headquarters | 1 | 55555 | 1971-06-19 |
| Sales | 2 | 123452 | 2010-02-02 |
| Development | 3 | 123456 | 2010-02-02 |
| New | 4 | 123432 | 2010-02-02 |
| New one | 5 | 12312 | 2010-02-02 |
| Networking | 6 | 99117 | 2009-05-15 |
| New department | 10 | 21321 | 2010-02-02 |
| QA | 11 | 913323708 | 2010-02-02 |
| ACA | 33 | 23324 | 2010-02-02 |
+-----+-----+-----+-----+
9 rows in set (0.00 sec)

mysql>
```

```
~/Doc/P/DB/Project1 node insert.js Department at 22:07:18

>> Table: Department
>> Department Name: Headquarters
>> Department Number: 1
>> Manager SSN: 55555
>> Manager Start Date: 1971-06-19

>> Data successfully inserted in table: Department

>> insert data
>> Table name: Department

>> Table: Department
>> Department Name: Networking
>> Department Number: 6
>> Manager SSN: 99117
>> Manager Start Date: 2009-05-15

>> Data successfully inserted in table: Department

>> exit
>> GOOD BYE !!

~/Doc/P/DB/Project1 took 1m 3s at 22:08:23
```

3. Source code is inside the zip folder.

Answer 2 →

use company;

- Question 2 Part 1

```
CREATE VIEW PROJ_EMPS as select project.Pname, employee.Lname, employee.Fname,
works_on.Hours from employee, project, works_on where employee.Dno = project.Dnum and
project.Pnumber = works_on.Pno ORDER BY project.Pname,employee.Lname, employee.Fname ASC;
Select * from PROJ_EMPS;
Select count(*) from PROJ_EMPS;
```

Pname	Lname	Fname	Hours
Advertizing	Jarvis	Jill	20.00
Advertizing	Jarvis	Jill	40.00
Advertizing	Jarvis	Jill	2.00
Advertizing	Jarvis	Jill	10.00
Advertizing	King	Ray	20.00
Advertizing	King	Ray	10.00
Advertizing	King	Ray	2.00
Advertizing	King	Ray	40.00
Advertizing	Liang	Percy	2.00
Advertizing	Liang	Percy	10.00
Advertizing	Liang	Percy	40.00
Advertizing	Liang	Percy	20.00
Advertizing	Linda	Juan	2.00
Advertizing	Linda	Juan	10.00
Advertizing	Linda	Juan	40.00
Advertizing	Linda	Juan	20.00
Advertizing	Mary	willie	20.00
Advertizing	Mary	willie	40.00
Advertizing	Mary	willie	10.00

PROJ_EMPS 58 x Result 59

count(*)	1088
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- Question 2 Part 2

```
Select COUNT(*) as 'No. of employee working' , project.Pname, project.Pnumber  
from employee, project where employee.Dno = project.Dnum GROUP BY project.Pnumber,  
project.Pname;
```