

# **Lab Exam**

## **DBMS**

Set A

Submitted By

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Q1)

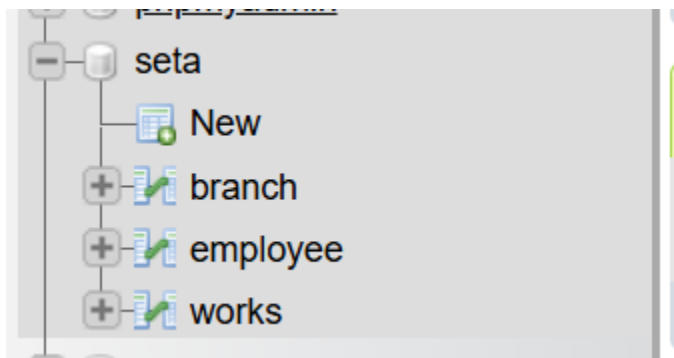


Table	Action	Rows	Type	Collation	Size	Overhead
<input type="checkbox"/> branch	★ Browse Structure Search Insert Empty Drop	4	InnoDB	utf8mb4_general_ci	16.0 KiB	-
<input type="checkbox"/> employee	★ Browse Structure Search Insert Empty Drop	5	InnoDB	utf8mb4_general_ci	16.0 KiB	-
<input type="checkbox"/> works	★ Browse Structure Search Insert Empty Drop	5	InnoDB	utf8mb4_general_ci	48.0 KiB	-
3 tables Sum		14	InnoDB	utf8mb4_general_ci	80.0 KiB	0 B

↑ ☐ Check all With selected: ▼

✓ Showing rows 0 - 3 (4 total, Query took 0.0002 seconds.)

SELECT \* FROM `branch`

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☐ Show all | Number of rows: 25 ▼ Filter rows: Search this table

Extra options

				Bid	Bname	Salary	Baddress
<input type="checkbox"/>	Edit	Copy	Delete	1	ABC	25000	Kathmandu
<input type="checkbox"/>	Edit	Copy	Delete	2	XYZ	20000	Pokhara
<input type="checkbox"/>	Edit	Copy	Delete	3	PQR	18000	Chitwan
<input type="checkbox"/>	Edit	Copy	Delete	4	LMN	22000	Butwal

↑ ☐ Check all With selected: Edit Copy Delete Export


















✓ Showing rows 0 - 4 (5 total, Query took 0.0002 seconds.)

```
SELECT * FROM `employee`
```

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☐ Show all | Number of rows: 25  Filter rows:

Extra options

								Eid	Ename	Eaddress	Egender
<input type="checkbox"/>		Edit		Copy		Delete		1	Ram	Kathmandu	Male
<input type="checkbox"/>		Edit		Copy		Delete		2	Sita	Pokhara	Female
<input type="checkbox"/>		Edit		Copy		Delete		3	Gopal	Chitwan	Male
<input type="checkbox"/>		Edit		Copy		Delete		4	Rita	Butwal	Female
<input type="checkbox"/>		Edit		Copy		Delete		5	Hari	Kathmandu	Male

✓ Showing rows 0 - 4 (5 total)

```
SELECT * FROM `works`
```

☐ Profiling [ [Edit inline](#) ] [ [Edit](#) ]

☐ Show all | Number of

Extra options

Bid	Eid
1	1
2	2
3	3
4	4
1	5

Q2) Display the information of an employee who works at the same address as their branch lies.

✓ Showing rows 0 - 4 (5 total, Query took 0.0003 seconds.)

```
SELECT E.* FROM Employee E JOIN Works W ON E.Eid = W.Eid JOIN Branch B ON W.Bid = B.Bid WHERE E.Eaddress = B.Baddress;
```

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☐ Show all | Number of rows: 25 ▾ Filter rows:  Sort by key: None ▾

Extra options

Eid	Ename	Eaddress	Egender
1	Ram	Kathmandu	Male
5	Hari	Kathmandu	Male
2	Sita	Pokhara	Female
3	Gopal	Chitwan	Male
4	Rita	Butwal	Female

Q3) Find the 2<sup>nd</sup> highest salary of an employee.

Showing rows 1 - 1 (1 total, Query took 0.0002 seconds.) [Salary: 22000... - 22000...]

```
SELECT DISTINCT salary FROM Branch ORDER BY salary DESC LIMIT 1 OFFSET 1;
```

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Extra options

	Salary
<input type="checkbox"/> Edit  Copy  Delete	22000

Q4) Find the top 3 employees who earn the highest salary.

Showing rows 0 - 2 (3 total, Query took 0.0004 seconds.) [Salary: 25000... - 22000...]

```
SELECT E.Ename, B.Salary FROM Employee E JOIN Works W ON E.Eid = W.Eid JOIN Branch B ON W.Bid = B.Bid ORDER BY B.Salary DESC LIMIT 3;
```

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Extra options

Ename	Salary	▼ 1
Ram	25000	
Hari	25000	
Rita	22000	

Q5) Sort employee and branch info by Ename.

✓ Showing rows 0 - 4 (5 total, Query took 0.0007 seconds.) [Ename: **GOPAL... - SITA...**]

```
SELECT E.*, B.* FROM Employee E JOIN Works W ON E.Eid = W.Eid JOIN Branch B ON W.Bid = B.Bid ORDER BY E.Ename;
```

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☐ Show all | Number of rows: 25 ▾ | Filter rows:  | Sort by key: None ▾

Extra options

Eid	Ename	Eaddress	Egender	Bid	Bname	Salary	Baddress
3	Gopal	Chitwan	Male	3	PQR	18000	Chitwan
5	Hari	Kathmandu	Male	1	ABC	25000	Kathmandu
1	Ram	Kathmandu	Male	1	ABC	25000	Kathmandu
4	Rita	Butwal	Female	4	LMN	22000	Butwal
2	Sita	Pokhara	Female	2	XYZ	20000	Pokhara

Q6) Find name and address of employees working in 'ABC' branch.

✓ Showing rows 0 - 1 (2 total, Query took 0.0002 seconds.)

```
SELECT E.Ename, E.Eaddress FROM Employee E JOIN Works W ON E.Eid = W.Eid JOIN Branch B ON W.Bid = B.Bid WHERE B.Bname = 'ABC';
```

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☐ Show all | Number of rows: 25 ▾ | Filter rows:  | Sort by key: None ▾

Extra options

Ename	Eaddress
Ram	Kathmandu
Hari	Kathmandu

Q7) Find the total no of branches.

Your SQL query has been executed successfully.

```
SELECT COUNT(*) AS TotalBranches FROM Branch;
```

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Extra options

TotalBranches
4

Q8) Find avg salary of employees whose name starts and ends with 's'.

✓ Showing rows 0 - 0 (1 total, Query took 0.0003 seconds.)

```
SELECT AVG(B.Salary) FROM Employee E JOIN Works W ON E.Eid = W.Eid JOIN Branch B ON W.Bid = B.Bid WHERE E.Ename LIKE 'S%S';
```

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☐ Show all | Number of rows: 25 ▼ | Filter rows:

Extra options

AVG(B.Salary)
NULL

Q9) Find the information about a female employee who works in 'ABC' branch and earns a salary more than avg salary of an employee.

✓ MySQL returned an empty result set (i.e. zero rows). (Query took 0.0005 seconds.)

```
SELECT E.* FROM Employee E JOIN Works W ON E.Eid = W.Eid JOIN Branch B ON W.Bid = B.Bid WHERE E.Egender = 'Female' AND B.Bname = 'ABC' AND B.Salary > (SELECT AVG(Salary) FROM Branch);
```

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Eid	Ename	Eaddress	Egender
-----	-------	----------	---------

Q10) Find the name of the department in which no employee works.


✓ MySQL returned an empty result set (i.e. zero rows). (Query took 0.0003 seconds.)


```
SELECT Bname FROM Branch WHERE Bid NOT IN (SELECT DISTINCT Bid FROM Works);
```

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Bname
-------

Query results operations

 Create view

 Bookmark this SQL query



Q11) What is the highest salary among males?

✓ Showing rows 0 - 0 (1 total, Query took 0.0004 seconds.)

```
SELECT MAX(B.Salary) FROM Employee E JOIN Works W ON E.Eid = W.Eid JOIN Branch B ON W.Bid = B.Bid WHERE E.Egender = 'Male';
```

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☐ Show all | Number of rows: 25 ▾ | Filter rows:

[Extra options](#)

MAX(B.Salary)
25000

Q12) What is the number of an employee who works in 'ABC' branch?

Your SQL query has been executed successfully.

```
SELECT COUNT(*) FROM Works W JOIN Branch B ON W.Bid = B.Bid WHERE B.Bname = 'ABC';
```

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[Extra options](#)

COUNT(*)
2

Q13) What is the highest salary among males?

✓ Showing rows 0 - 3 (4 total, Query took 0.0002 seconds.)

```
SELECT B.Bname, MAX(B.Salary) FROM Branch B GROUP BY B.Bname;
```

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☐ Show all | Number of rows:  Filter rows:

Extra options

				Bname	MAX(B.Salary)			
<input type="checkbox"/>		Edit		Copy		Delete	ABC	25000
<input type="checkbox"/>		Edit		Copy		Delete	LMN	22000
<input type="checkbox"/>		Edit		Copy		Delete	PQR	18000
<input type="checkbox"/>		Edit		Copy		Delete	XYZ	20000

Q14) What is the total salary distributed in the 'ABC' branch?

✓ Showing rows 0 - 0 (1 total, Query took 0.0002 seconds.)

```
SELECT SUM(B.Salary) FROM Branch B WHERE B.Bname = 'ABC';
```

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☐ Show all | Number of rows:  Filter rows:

Extra options

SUM(B.Salary)
25000

Q15) Display information of an employee who works in either address (Ktm, Cht, Pkr) and id<4.

✓ Showing rows 0 - 2 (3 total, Query took 0.0002 seconds.)

```
SELECT E.* FROM Employee E WHERE E.Eaddress IN ('Kathmandu', 'Chitwan', 'Pokhara') AND Eid < 4;
```

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☐ Show all | Number of rows: 25 ▾ | Filter rows:  | Sort by key: None ▾

Extra options

				Eid	Ename	Eaddress	Egender			
<input type="checkbox"/>		<a href="#">Edit</a>		<a href="#">Copy</a>		<a href="#">Delete</a>	1	Ram	Kathmandu	Male
<input type="checkbox"/>		<a href="#">Edit</a>		<a href="#">Copy</a>		<a href="#">Delete</a>	2	Sita	Pokhara	Female
<input type="checkbox"/>		<a href="#">Edit</a>		<a href="#">Copy</a>		<a href="#">Delete</a>	3	Gopal	Chitwan	Male

Q16) Increase the salary of an employee by 20% whose id is between 4-5.

✓ 1 row affected. (Query took 0.0002 seconds.)

```
UPDATE Branch SET salary = salary * 1.2 WHERE Bid BETWEEN 4 AND 5;
```

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Q17) Update the employee name as hari and address as 'ktm' who works in ABC branch and male.

✓ 0 rows affected. (Query took 0.0003 seconds.)

```
UPDATE Employee SET Ename = 'Hari', Eaddress = 'Kathmandu' WHERE Ename = 'Krishna' AND Egender = 'Male';
```

[ [Edit inline](#) ] [ [Edit](#) ] [ [Create PHP code](#) ]

Q18) Update ename, name and gender that belongs to 'ABC' company which lies in 'cht'.

✓ 0 rows affected. (Query took 0.0003 seconds.)

```
UPDATE Employee SET Ename = 'Updated Name', Egender = 'Updated Gender' WHERE Eid IN (SELECT W.Eid FROM Works W JOIN Branch B ON W.Bid = B.Bid WHERE B.Bname = 'ABC' AND B.Baddress = 'Chitwan');
```

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Q19) Delete the info of ram whose salary is 20000 and from ktm.

✓ 0 rows deleted. (Query took 0.0002 seconds.)

```
DELETE FROM Employee WHERE Ename = 'Ram' AND Eid IN (SELECT W.Eid FROM Works W JOIN Branch B ON W.Bid = B.Bid WHERE B.Salary = 20000 AND B.Baddress = 'Kathmandu');
```

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Q20) Delete info of branch with name 'ABC' and lies in 'cht' and an employee with name hari works.

✓ 0 rows deleted. (Query took 0.0002 seconds.)

```
DELETE FROM Branch WHERE Bname = 'ABC' AND Baddress = 'Chitwan' AND Bid IN (SELECT W.Bid FROM Works W JOIN Employee E ON W.Eid = E.Eid WHERE E.Ename = 'Hari');
```

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