

Lab Exam

DBMS

Set A

Submitted By

Arpan Adhikari

Roll No. 231309

Q1)

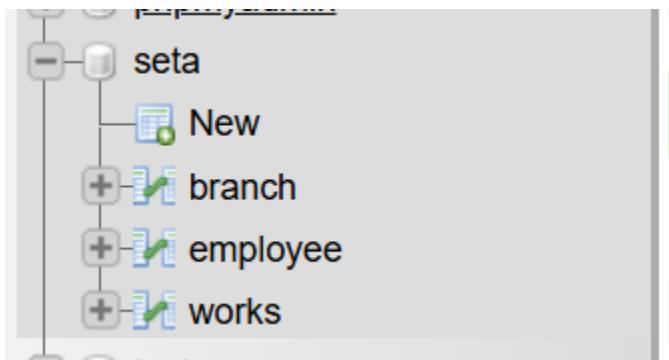


Table Action

Table	Action	Rows	Type	Collation	Size	Overhead
branch	Browse Structure Search Insert Empty Drop	4	InnoDB	utf8mb4_general_ci	16.0 KiB	-
employee	Browse Structure Search Insert Empty Drop	5	InnoDB	utf8mb4_general_ci	16.0 KiB	-
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

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

SELECT * FROM `branch`

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all Number of rows: 25 Filter rows: Search this table

Extra options

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

Check all With selected: [Edit](#) [Copy](#) [Delete](#)

[Up](#) [Check all](#) With selected: [Edit](#) [Copy](#) [Delete](#) [Export](#)

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

SELECT * FROM `employee`

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all

Number of rows:

25 ▾

Filter rows:

Search this table

Extra options

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

Showing rows 0 - 4 (5 total)

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

Profiling [Edit inline] [Edit]

Show all | Number of rows:

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;
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 | Filter rows: Search this table | 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 2nd 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;
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Extra options

← T →		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;
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Extra options

Ename	Salary
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;
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 ▾ Filter rows: Search this table 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';
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 ▾ Filter rows: Search this table 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;
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

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';
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

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

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);
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

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);
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

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';
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

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

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';
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

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;
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all

Number of rows:

25 ▾

Filter rows:

Search this table

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';
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all

Number of rows:

25 ▾

Filter rows:

Search this table

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;
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 Filter rows: Search this table Sort by key: None

Extra options

Eid	Ename	Eaddress	Egender
1	Ram	Kathmandu	Male
2	Sita	Pokhara	Female
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;
```

[Edit inline] [Edit] [Create PHP code]

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');
```

[Edit inline] [Edit] [Create PHP code]

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');  
[ Edit inline ] [ Edit ] [ Create PHP code ]
```

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');  
[ Edit inline ] [ Edit ] [ Create PHP code ]
```