

DBMS - Lab Assignment 4

1. Order by Clause

```
SELECT * FROM Patient ORDER BY P_dob;
```

The screenshot displays the MySQL Workbench interface. The top panel shows the 'Query 1' editor with the following SQL query:

```
SELECT * FROM Patient ORDER BY P_dob;
```

The middle panel shows the results of the query, sorted by the date of birth (P_dob) in descending order. The results are displayed in a table with the following columns: #, P_id, P_first_name, P_last_name, P_dob, P_mobile, P_address, P_insurance, and Doc_id.

#	P_id	P_first_name	P_last_name	P_dob	P_mobile	P_address	P_insurance	Doc_id
1	10	Kshitiz	Michael	1940-11-01	7740562398	Srinagar	asdfghjkl	104
2	5	Sunil	Ravula	1947-05-27	60155218763	Patna	qwertyuiop	103
3	3	Rajendra	Raj	1958-05-27	6045218763	Hubli	qwertyuiop	103
4	1	Rahul	Raj	1978-05-27	6045218763	Bihar	qwertyuiop	102
5	9	Akash	Kumar	1989-05-27	6045218763	Manali	qwertyuiop	103
6	2	Ramesh	Athe	1999-11-01	7740562398	Delhi	asdfghjkl	101
7	4	Ramesh	Athe	1999-11-01	7740562398	Dharwad	asdfghjkl	104
8	6	Rajesh	Kumar	1999-11-01	7740562398	Delhi	asdfghjkl	104
9	8	Mithil	Anchan	1999-11-01	7740562398	Mumbai	asdfghjkl	104
10	7	Advay	Aggarwal	2018-05-27	6045218763	Ooty	qwertyuiop	103

The bottom panel shows the 'Action Output' tab, which displays the execution details of the query. The output shows that the query was executed successfully, returning 10 rows in 0.0010 seconds.

#	Time	Action	Message	Duration / Fetch
67	12:53:13	INSERT INTO Doctor VALUES (103,'Pavan','Sharma',778...	4 row(s) affected Records: 2 Duplicates: 0 Warnings: 0	0.160 sec
68	12:53:23	SELECT * FROM Doctor LIMIT 0, 1000	4 row(s) returned	0.00066 sec / 0.000...
69	12:53:41	INSERT INTO Patient VALUES (1,'Rahul','Raj','1978-05-27...	2 row(s) affected Records: 2 Duplicates: 0 Warnings: 0	0.067 sec
70	12:53:49	INSERT INTO Patient VALUES (3,'Rajendra','Raj','1958-0...	8 row(s) affected Records: 8 Duplicates: 0 Warnings: 0	0.100 sec
71	12:53:57	SELECT * FROM Patient LIMIT 0, 1000	10 row(s) returned	0.00097 sec / 0.000...
72	12:56:27	SELECT * FROM Patient ORDER BY P_dob LIMIT 0, 1000	10 row(s) returned	0.0010 sec / 0.000...

Query Completed

2. Group by and having

SELECT Doc_id as Doctor_Id, count(P_id) ad NumberOfPatients FROM Patient group by Doc_id;

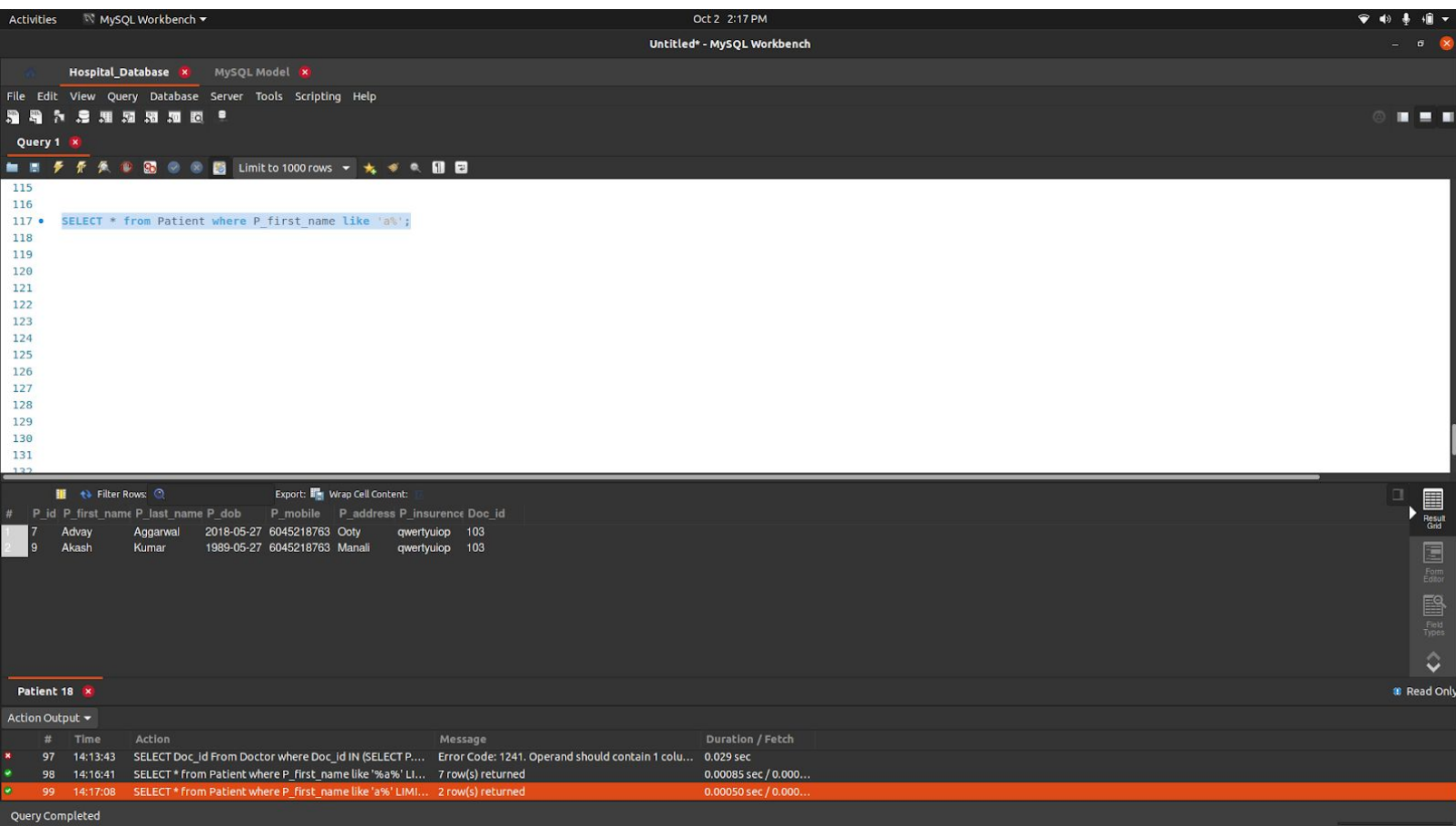
The screenshot displays the MySQL Workbench interface. The top panel shows the 'Hospital_Database' and 'MySQL Model' tabs. The main editor area contains a SQL query: `SELECT Doc_id as Doctor_Id, count(P_id) as NumberOfPatients FROM Patient group by Doc_id;`. The bottom panel shows the 'Result 9' tab with a table of results. The table has two columns: 'Doctor_Id' and 'NumberOfPatients'. The results are as follows:

#	Doctor_Id	NumberOfPatients
1	101	1
2	102	1
3	103	4
4	104	4

The bottom panel also shows the 'Action Output' tab with a log of actions. The log shows three actions: a SELECT count query, a SELECT Doc_id, count(P_id) query, and a SELECT Doc_id as Doctor_Id, count(P_id) as NumberOfPatients query. The last action is highlighted in orange.

4. Logical operators especially with LIKE

```
SELECT * from Patient where P_first_name like 'a%' ;
```



The screenshot displays the MySQL Workbench interface. The top toolbar includes icons for file operations, query execution, and database management. The main editor window shows the following SQL query:

```
SELECT * from Patient where P_first_name like 'a%';
```

Below the query editor, the results pane shows a table with the following data:

#	P_id	P_first_name	P_last_name	P_dob	P_mobile	P_address	P_insurance	Doc_id
1	7	Advay	Aggarwal	2018-05-27	6045218763	Ooty	qwertyuiop	103
2	9	Akash	Kumar	1989-05-27	6045218763	Manali	qwertyuiop	103

The bottom pane shows the 'Action Output' tab with the following log entries:

#	Time	Action	Message	Duration / Fetch
97	14:13:43	SELECT Doc_Id From Doctor where Doc_Id IN (SELECT P...	Error Code: 1241. Operand should contain 1 colu...	0.029 sec
98	14:16:41	SELECT * from Patient where P_first_name like '%a%' LI...	7 row(s) returned	0.00085 sec / 0.000...
99	14:17:08	SELECT * from Patient where P_first_name like 'a%' LIM...	2 row(s) returned	0.00050 sec / 0.000...

The status bar at the bottom indicates 'Query Completed'.