

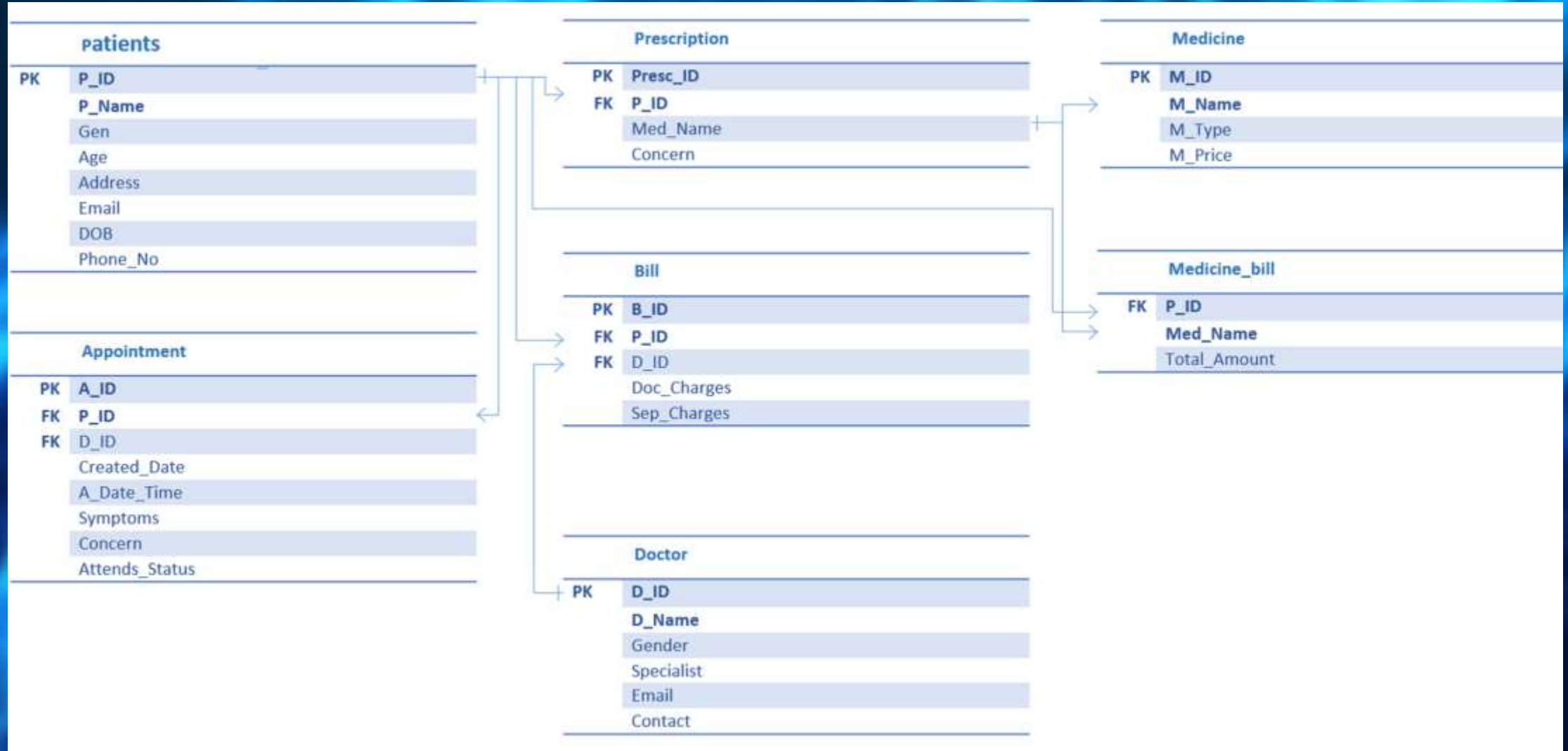


HOSPITAL MANAGEMENT SYSTEM

INTRODUCTION

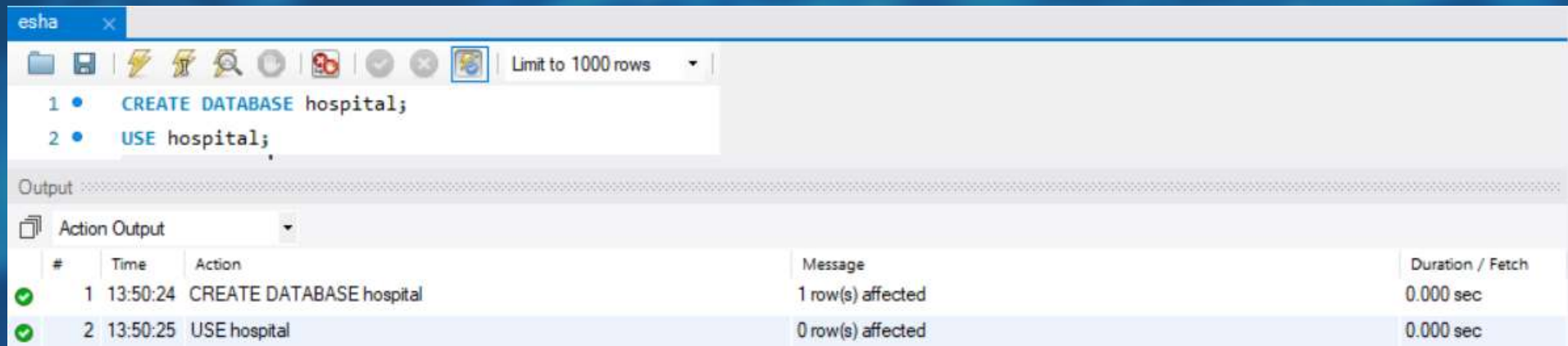
HOSPITAL MANAGEMENT SYSTEM HANDLES ACTIVITIES OF MAJOR DEPARTMENT LIKE PATIENT MANAGEMENT, DOCTOR DEPARTMENT, BILLING DEPARTMENT, MEDICAL DEPARTMENT, ETC. IT IS VERY DIFFICULT FOR THE HOSPITAL TO MAINTAIN ITS DAY-TO-DAY ACTIVITIES AND RECORDS MANUALLY. THIS IS WHY A DATABASE IS REQUIRED TO KEEP RECORDS OF ALL TYPE OF ACTIVITIES OF A HOSPITAL. IT WILL HELP TO CONNECT ALL THE DEPARTMENT ON A SINGLE PLATFORM AND BRING IN BETTER CO-ORDINATION AMONG THE DIFFERENT DEPARTMENTS.

ENTITY RELATIONSHIP DIAGRAM



DATA DEFINITION LANGUAGE (DDL)

➤ CREATE A DATABASE AND USE IT



The screenshot shows a database management tool window with a tab labeled 'esha'. The toolbar includes icons for file operations, execution, and a 'Limit to 1000 rows' dropdown. The SQL editor contains two commands: 'CREATE DATABASE hospital;' and 'USE hospital;'. The 'Output' section is expanded to show 'Action Output'.

#	Time	Action	Message	Duration / Fetch
✓ 1	13:50:24	CREATE DATABASE hospital	1 row(s) affected	0.000 sec
✓ 2	13:50:25	USE hospital	0 row(s) affected	0.000 sec

➤ CREATE REQUIRED TABLES

```
4 CREATE TABLE patients(  
5     P_ID INT PRIMARY KEY,  
6     P_Name VARCHAR(30),  
7     Gen VARCHAR(10),  
8     Age FLOAT,  
9     Address VARCHAR(100),  
10    Email VARCHAR(30) DEFAULT('xyz@gmail.com'),  
11    DOB DATE,  
12    Phone_No BIGINT);  
13  
14 CREATE TABLE doctor(  
15     D_ID INT PRIMARY KEY,  
16     D_Name VARCHAR(30),  
17     Gender VARCHAR(10),
```

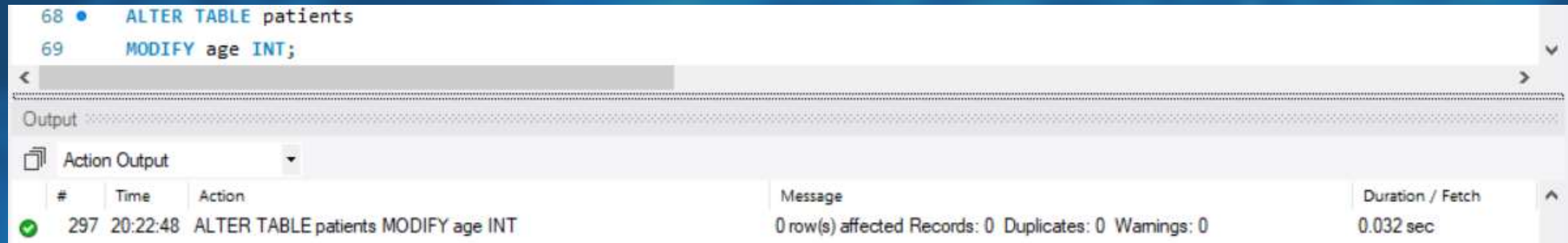
Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 289	20:22:11	CREATE TABLE patients(P_ID INT PRIMARY KEY, P_Name VARCH...	0 row(s) affected	0.000 sec
✓ 290	20:22:12	CREATE TABLE doctor(D_ID INT PRIMARY KEY, D_Name VARCHA...	0 row(s) affected	0.015 sec
✓ 291	20:22:14	CREATE TABLE appointment(A_ID INT PRIMARY KEY, P_ID INT, D_...	0 row(s) affected	0.016 sec
✓ 292	20:22:16	CREATE TABLE prescription(Presc_ID INT PRIMARY KEY, P_ID INT,...	0 row(s) affected	0.016 sec
✓ 293	20:22:23	CREATE TABLE medicine(M_ID INT PRIMARY KEY, M_Name VARCH...	0 row(s) affected	0.000 sec
✓ 294	20:22:24	CREATE TABLE medicineb(P_ID INT, Med_Name VARCHAR(100), T...	0 row(s) affected	0.015 sec
✓ 295	20:22:26	CREATE TABLE bill(B_ID INT PRIMARY KEY, P_ID INT, D_ID INT, D...	0 row(s) affected	0.016 sec
✓ 296	20:22:27	CREATE TABLE reports(ID INT PRIMARY KEY, Name VARCHAR(100...	0 row(s) affected	0.016 sec
✓ 297	20:22:48	ALTER TABLE patients MODIFY age INT	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.032 sec
✓ 298	20:22:49	ALTER TABLE bill ADD Total_Charges INT	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.016 sec
✓ 299	20:22:50	ALTER TABLE reports DROP COLUMN Type	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.016 sec

➤ ALTER THE VALUE OF A PARTICULAR TABLE ACCORDING TO THE CONDITION

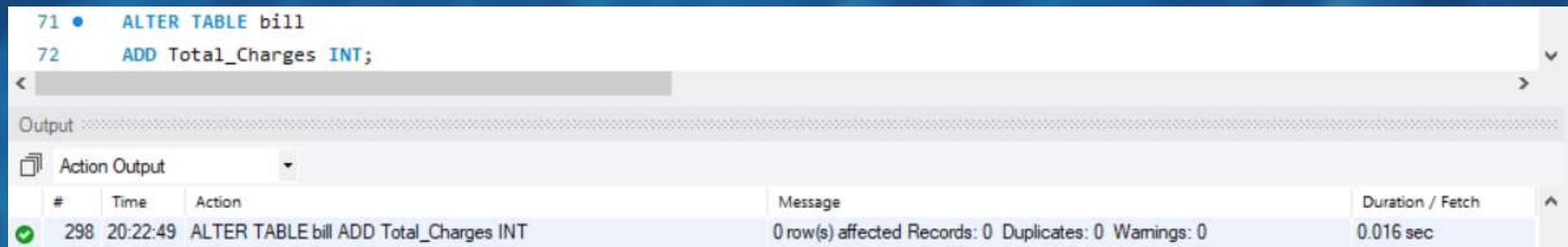
- MODIFY DATA TYPE USING ALTER —
MODIFY THE DATA TYPE OF AGE TO INT



The screenshot shows a SQL query editor with two lines of code: '68 ALTER TABLE patients' and '69 MODIFY age INT;'. Below the editor is an 'Output' section with a dropdown menu set to 'Action Output'. The output table has five columns: '#', 'Time', 'Action', 'Message', and 'Duration / Fetch'. A single row is displayed with a green checkmark icon, indicating successful execution.

#	Time	Action	Message	Duration / Fetch
297	20:22:48	ALTER TABLE patients MODIFY age INT	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.032 sec

- ADD COLUMN USING ALTER —
ADD COLUMN Total_BILL TO BILL TABLE WITH INT DATATYPE



The screenshot shows a SQL query editor with two lines of code: '71 ALTER TABLE bill' and '72 ADD Total_Charges INT;'. Below the editor is an 'Output' section with a dropdown menu set to 'Action Output'. The output table has five columns: '#', 'Time', 'Action', 'Message', and 'Duration / Fetch'. A single row is displayed with a green checkmark icon, indicating successful execution.

#	Time	Action	Message	Duration / Fetch
298	20:22:49	ALTER TABLE bill ADD Total_Charges INT	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.016 sec

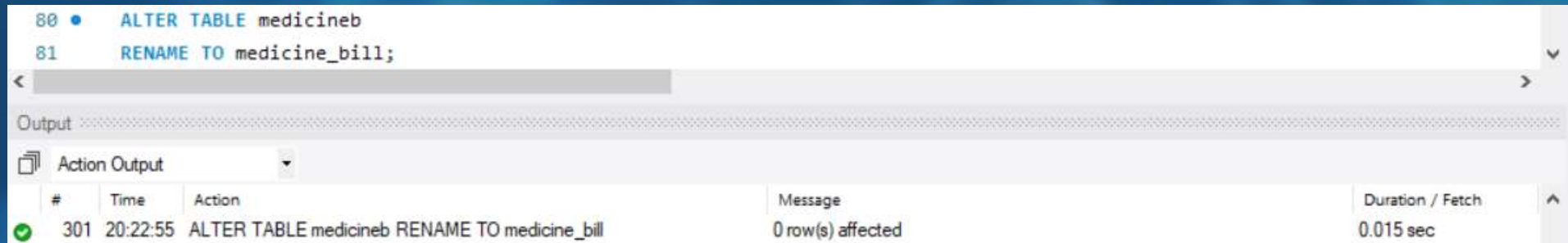
- DROP COLUMN USING ALTER —
DROP COLUMN 'TYPE' FROM REPORTS TABLE

74	•	ALTER TABLE reports			
75		DROP COLUMN Type;			
Output					
Action Output					
#	Time	Action	Message	Duration / Fetch	
299	20:22:50	ALTER TABLE reports DROP COLUMN Type	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.016 sec	

- RENAME COLUMN USING ALTER—
RENAME COLUMN NAME FROM GEN TO GENDER FROM PATIENT TABLE

77	•	ALTER TABLE patients			
78		CHANGE COLUMN Gen Gender VARCHAR(10);			
Output					
Action Output					
#	Time	Action	Message	Duration / Fetch	
300	20:22:52	ALTER TABLE patients CHANGE COLUMN Gen Gender VARCHAR(10)	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.016 sec	

- RENAME TABLE NAME USING ALTER —
RENAME TABLE NAME FROM MEDICINEB TO MEDICINE_BILL



The screenshot shows a SQL query editor with two lines of code: `ALTER TABLE medicineb` on line 80 and `RENAME TO medicine_bill;` on line 81. Below the editor is an 'Output' section with a dropdown menu set to 'Action Output'. The output is a table with five columns: '#', 'Time', 'Action', 'Message', and 'Duration / Fetch'. A single row of output is displayed, indicating the successful execution of the rename operation.

#	Time	Action	Message	Duration / Fetch
301	20:22:55	ALTER TABLE medicineb RENAME TO medicine_bill	0 row(s) affected	0.015 sec

➤ TRUNCATE TABLE

TRUNCATE TABLE NAMED REPORTS

83 • TRUNCATE TABLE reports;					
Output					
Action Output					
	#	Time	Action	Message	Duration / Fetch
✓	302	20:22:56	TRUNCATE TABLE reports	0 row(s) affected	0.016 sec

➤ DROP TABLE

DELETE THE TABLE NAMED REPORTS



The screenshot shows a database management interface. At the top, a command bar contains the text "85 • DROP TABLE reports;". Below this is a horizontal scrollbar. Underneath the scrollbar is a section labeled "Output" with a dotted background. Below the "Output" section is a tab labeled "Action Output" with a dropdown arrow. Below the tab is a table with the following data:

#	Time	Action	Message	Duration / Fetch
✓ 303	20:22:56	DROP TABLE reports	0 row(s) affected	0.000 sec

DATA MODIFICATION LANGUAGE (DML)

➤ INSERT THE VALUES TO THE EXISTING TABLES

```
87 • INSERT INTO patients VALUES
88 (101,'Kshitija Jadhav','Female',20,'271, S Bhagat Singh Rd, Nr G.P.O, Fort','kshitijajadhav@gmail.com','2003-10-10',9076543);
89 (102,'Amar Navale','Male',8,'201, Shree Sai Dham, 90 Feet Road, Jhulelal Chowk, Ghatkoper (east)','amarnavale@gmail.com','21
90 (103,'Sai Ahire','Male',17,'S V Road, Malad Shopping Centr Opp Bank Of Baroda, Goregaon (west)','saiashire@yahoo.com','2006-1
91 (104,'Sakshi Jadhav','Female',11,'1/1a, Shah Niwas, Zakaria Road, Malad(w)','sakshijadhav@gmail.com','2012-03-09',765432109);
92 (105,'Krishav Pandey','Male',30,'Ramanand Society, Gokhale Road, Naupada, Near Samartha Bhandar, Thane(w)','krishavpandey@ym
93 (106,'Sneha Gore','Female',13,'18, Lila Mandir, Pestom Sagar Rd-4, Opp Shoperstop, Chembur',NULL,'2010-09-09',8765123459);
94 (107,'Sapna Chandan','Female',14,'K K Marg, 560 Rasul Compound, Jacob Circle',NULL,'2009-07-25',7651234560);
95 (108,'Kartik Singh','Male',30,'15, Kesakaka Compound, I.b.patel Road, Kalbadevi','kartiksingh@yahoo.com','1993-03-17',90688);
96 (109,'Sahil Yadav','Male',22,'19, Rajmahal Shopping Centre, Azad Road, Andheri (west)','sahilyadav@gmail.com','2001-04
97 (110,'Himanshu Singh','Male',6,'Silvadwel Ground Flo Silvadwel, 3 Silvadwel 447 Pitambar Lane, Rahim','himanshusingh22@gmail
98 (111,'Dhanashree Pawar','Female',40,'Chandivali Indl Area, Off Saki Vihar Rd, Sakinaka, Andheri(e)',NULL,'1982-12-12',79582);
99 (112,'Shinchana Chandan','Female',34,'21, O/s Shahpur Gate, Ahmedabad','shinchana.chandan@gmail.com','1998-11-14',6747321345);
100 (113,'Gauri Gonjari','Female',28,'Shop No 15, 52/52a, Corner Of Islampura Stree, Nanubahi Desai Rd, Khetwadi','gauri
101 (114,'Akshata Mane','Female',35,'11, G 4 Mahavir Mahal, 130 Garodia Nagar, Nr Patankar Park, Ghatkoper (east)','i
102 (115,'Khushi Cheddha','Female',85,'412, 4th Floor, Laxmi Plaza, Link Rd, Laxmi Indl Est, Andheri (west)','khushicheddha@yma
103 (116,'Deepak Jadhav','Male',38,'69/6, Golde Wal Building, Bhandari Street, Girgaon','deepakjadhav@yahoo.com','1985-02-07',51
104 (117,'Sahil Acharekar','Male',63,'C-75/2, 3rd Stage, Peenya Industrial Estate, Bangalore','sahilacharekar@yahoo.com','11
```

#	Time	Action	Message	Duration / Fetch
304	20:22:58	INSERT INTO patients VALUES (101,'Kshitija Jadhav','Female',20,'271, S Bhagat Singh Rd, Nr G.P.O, Fort','kshitijajadhav@gmail.com','2003-10-10',9076543);	41 row(s) affected Records: 41 Duplicates: 0 Warnings: 0	0.000 sec
305	20:23:01	INSERT INTO doctor VALUES (1,'Aahish Prajapati','Male','Diabetes Mel...	20 row(s) affected Records: 20 Duplicates: 0 Warnings: 0	0.000 sec
306	20:23:03	INSERT INTO appointment VALUES (10001,124.1,'2023-09-15','2023-...	12 row(s) affected Records: 12 Duplicates: 0 Warnings: 0	0.000 sec
307	20:23:04	INSERT INTO prescription VALUES (5101,138,'HERCEPTIN 440MG I...	40 row(s) affected Records: 40 Duplicates: 0 Warnings: 0	0.000 sec
308	20:23:06	INSERT INTO medicine VALUES (501,'Insulin Injection','Diabetes Mell...	37 row(s) affected Records: 37 Duplicates: 0 Warnings: 0	0.000 sec
309	20:23:09	INSERT INTO medicine_bill VALUES (106,'Melphalan 5 Mg Tablet',393...	20 row(s) affected Records: 20 Duplicates: 0 Warnings: 0	0.000 sec
310	20:23:11	INSERT INTO bill(B_ID,P_ID,D_ID,Doc_Charges,Sep_Charges) VALU...	40 row(s) affected Records: 40 Duplicates: 0 Warnings: 0	0.000 sec

➤ DELETE A ROW

DELETE AN ENTRY HAVING P_ID = 141 FROM PATIENTS TABLE

```
312 • DELETE FROM patients
313 WHERE P_ID = 141;
```

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 311	20:23:35	DELETE FROM patients WHERE P_ID = 141	1 row(s) affected	0.000 sec

➤ UPDATE A ROW

UPDATE AN ENTRY OF DOB TO '2020-01-10' FROM PATIENTS TABLE HAVING EMAIL = 'PRATHAMESHSAWKARE@YAHOO.COM'

```
315 • UPDATE patients
316 SET DOB = '2020-01-10'
317 WHERE Email = 'prathameshsawkare@yahoo.com';
```

Output

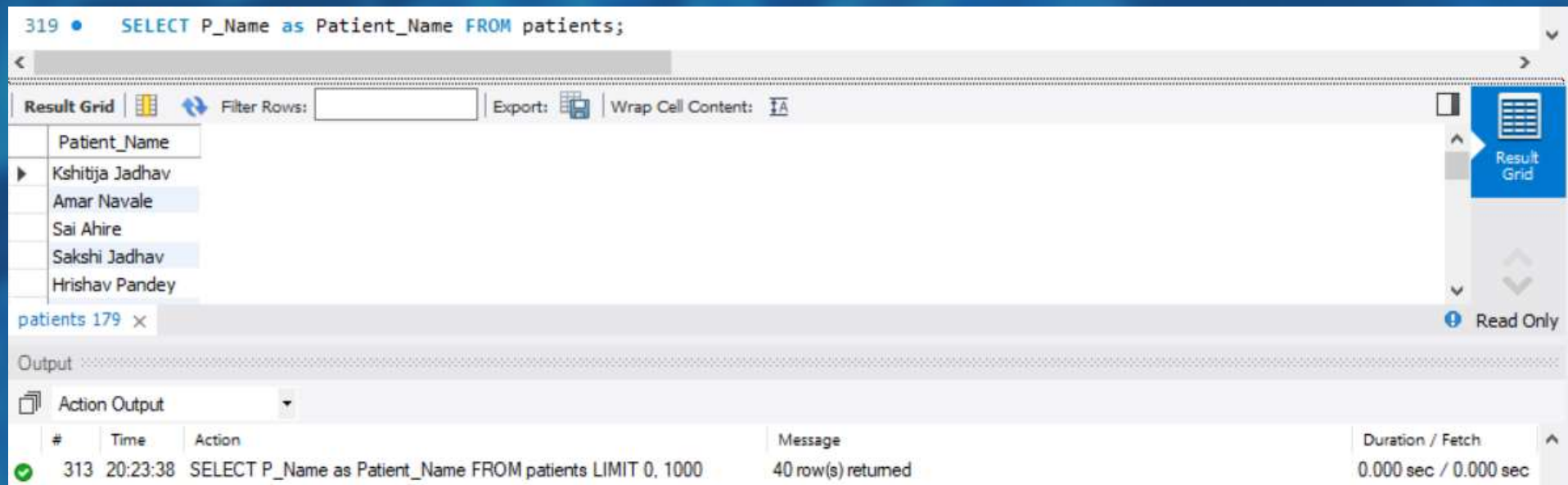
Action Output

#	Time	Action	Message	Duration / Fetch
✓ 312	20:23:37	UPDATE patients SET DOB = '2020-01-10' WHERE Email = 'prathame...	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0	0.000 sec

DATA QUERY LANGUAGE (DQL)

➤ AS CLAUSE

- ALIAS —
DISPLAY P_NAME FROM PATIENTS TABLE AS PATIENT_NAME



```
319 • SELECT P_Name as Patient_Name FROM patients;
```

Result Grid

Patient_Name
Kshitija Jadhav
Amar Navale
Sai Ahire
Sakshi Jadhav
Hrishav Pandey

patients 179 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
313	20:23:38	SELECT P_Name as Patient_Name FROM patients LIMIT 0, 1000	40 row(s) returned	0.000 sec / 0.000 sec

➤ IS OPERATOR

- IS NULL –
DISPLAY DETAILS OF PATIENTS WHOSE EMAIL IS NULL

321 • `SELECT * FROM patients WHERE Email IS NULL;`

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: |

	P_ID	P_Name	Gender	age	Address	Email	DOB	Phone_No
▶	106	Sneha Gore	Female	13	18, Lila Mandir, Pestom Sagar Rd-4, Opp Shope...	NULL	2010-09-09	8765123459
	107	Sapna Chandan	Female	14	K K Marg, 560 Rasul Compound, Jacob Circle	NULL	2009-07-25	7651234980
	111	Dhanashree Pawar	Female	40	Chandivali Indl Area, Off Saki Vihar Rd, Sakinak...	NULL	1982-12-12	7958287004
	118	Sahil Dalvi	Male	8	4-1-602, Troop Bazar, Hyderabad	NULL	2015-01-25	8086963081
	126	Bibek Majhi	Male	21	3/24, Anand Nagar, Opp Rationing Office, Sant...	NULL	2001-10-21	7978316842

patients 180 x Apply Revert

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 314	20:23:43	<code>SELECT * FROM patients WHERE Email IS NULL LIMIT 0, 1000</code>	6 row(s) returned	0.000 sec / 0.000 sec

- IS NOT NULL –
DISPLAY DETAILS OF APPOINTMENT WHOSE ATTENDS_STATUS IS NOT NULL

323 • `SELECT * FROM appointment WHERE Attends_Status IS NOT NULL;`

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: |

	A_ID	P_ID	D_ID	Created_Date	A_Date_Time	Symptoms	Concern	Attends_Status
▶	10001	124	1	2023-09-15	2023-09-19 15:00:00	Increased thirst, frequent urination	Diabetes Mellitus	Did not attend
	10002	117	8	2023-09-17	2023-09-17 13:00:00	Lumps and fatigue	Cancer	Completed
	10003	109	13	2023-09-26	2023-09-27 19:30:00	coughing, shortness of breath	Asthma	Completed
	10004	130	5	2023-09-26	2023-09-27 11:45:00	Joint pain, swelling	Rheumatoid Arthritis	Cancelled
	10006	111	12	2023-10-02	2023-10-09 18:30:00	Memory loss, cognitive decline	Alzheimer's Disease	Completed

appointment 181 x Apply Revert

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 315	20:23:44	SELECT * FROM appointment WHERE Attends_Status IS NOT NULL ...	10 row(s) returned	0.000 sec / 0.000 sec

➤ LOGICAL OPEARATORS

- LIKE —

DISPLAY DETAILS OF PATIENTS HAVING SECOND LAST LETTER 'H' IN THEIR NAMES

325 • `SELECT * FROM patients WHERE P_Name LIKE '%h_';`

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: |

	P_ID	P_Name	Gender	age	Address	Email	DOB	Phone_No
▶	115	Khushi Cheddha	Female	85	412, 4th Floor, Laxmi Plaza, Link Rd, Laxmi Indl ...	khushicheddha@gmail.com	1938-08-01	7711956413
	126	Bibek Majhi	Male	21	3/24, Anand Nagar, Opp Rationing Office, Sant...	NULL	2001-10-21	7978316842
•	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

patients 182 x Apply Revert

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 316	20:23:45	SELECT * FROM patients WHERE P_Name LIKE '%h_' LIMIT 0, 1000	2 row(s) returned	0.000 sec / 0.000 sec

- BETWEEN –
DISPLAY NAMES AND PRICE OF MEDICINES WHOSE PRICE IS MORE THAN 5000
AND LESS THAN 15000

327 • `SELECT M_Name, M_Price FROM Medicine WHERE M_Price BETWEEN 5000 AND 15000;`

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

M_Name	M_Price
Migraine Ayurvedic Management 30 Days Pack	5225
Mavyret Glecaprevir Pibrentasvir 100 mg/40 mg	13055
Epclusa 400mg 100mg Tablet	6160
Remicade, 100 mg	14000
Bevacirel 100mg /4ml Bevacizumab Injection	5000

Medicine 183 x Read Only

Output

Action Output

#	Time	Action	Message	Duration / Fetch
317	20:23:48	SELECT M_Name, M_Price FROM Medicine WHERE M_Price BETW...	5 row(s) returned	0.000 sec / 0.000 sec

- AND —
DISPLAY P_NAME OF PATIENTS HAVING FEMALE GENDER AND 'SINGH' IN THEIR NAMES

327 • `SELECT M_Name, M_Price FROM Medicine WHERE M_Price BETWEEN 5000 AND 15000;`

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

M_Name	M_Price
Migraine Ayurvedic Management 30 Days Pack	5225
Mavyret Glecaprevir Pibrentasvir 100 mg/40 mg	13055
Epclusa 400mg 100mg Tablet	6160
Remicade, 100 mg	14000
Bevacirel 100mg /4ml Bevacizumab Injection	5000

Medicine 16 x Read Only

Output

Action Output

#	Time	Action	Message	Duration / Fetch
30	13:53:41	SELECT M_Name, M_Price FROM Medicine WHERE M_Price BETW...	5 row(s) returned	0.000 sec / 0.000 sec

- OR –
DISPLAY DETAILS OF PATIENTS WHO ARE FROM MALAD OR ANDHERI

329 • `SELECT * FROM patients WHERE Address LIKE '%Malad%' OR Address LIKE '%Andheri%';`

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: |

	P_ID	P_Name	Gender	age	Address	Email	DOB	Phone_No
▶	103	Sai Ahire	Male	17	S V Road, Malad Shopping Centr Opp Bank Of B...	saiahire@yahoo.com	2006-02-12	8765432109
	104	Sakshi Jadhav	Female	11	1/1a, Shah Niwas, Zakaria Road, Malad(w)	sakshijadhav@gmail.com	2012-03-09	7654321098
	109	Sahil Yadav	Male	22	19, Rajmahal Shopping Centre, Azad Road, An...	sahilyadav@gmail.com	2001-04-19	7030821253
	111	Dhanashree Pawar	Female	40	Chandivali Indl Area, Off Saki Vihar Rd, Sakinak...	NULL	1982-12-12	7958287004
	115	Khushi Cheddha	Female	85	412, 4th Floor, Laxmi Plaza, Link Rd, Laxmi Indl ...	khushicheddha@gmail.com	1938-08-01	7711956413

patients 189 x Apply Revert

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 326	20:57:26	SELECT * FROM patients WHERE Address LIKE "%Malad%" OR Adre...	7 row(s) returned	0.000 sec / 0.000 sec

- IN —
DISPLAY DETAILS OF DOCTORS WHO ARE ASHTMA AND CANCER SPECIALIST.

333 • `SELECT * FROM doctor having Specialist IN ('Asthma','Cancer');`

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: |

	D_ID	D_Name	Gender	Specialist	Email	Contact
▶	8	Jay Khamankar	Male	Cancer	jaykhamankar@gmail.com	7916198562
	10	Gurupreet Kaur	Female	Cancer	gurupreetkaur@yahoo.com	7580487033
	11	Aditya Sawant	Male	Cancer	adityasawant@gmail.com	8951136697
*	NULL	NULL	NULL	NULL	NULL	NULL

doctor 17 x Apply

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 33	13:54:18	SELECT * FROM doctor having Specialist IN ('Asthma','Cancer') LIMIT ...	3 row(s) returned	0.000 sec / 0.000 sec

- NOT –
DISPLAY DETAILS OF APPOINTMENT WHOSE CONCERN IS NOT 'DIABETES MELLITUS'

335 • `SELECT * FROM appointment WHERE NOT Concern = 'Diabetes Mellitus';`

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: |

	A_ID	P_ID	D_ID	Created_Date	A_Date_Time	Symptoms	Concern	Attends_Status
▶	10002	117	8	2023-09-17	2023-09-17 13:00:00	Lumps and fatigue	Cancer	Completed
	10003	109	13	2023-09-26	2023-09-27 19:30:00	coughing, shortness of breath	Asthma	Completed
	10004	130	5	2023-09-26	2023-09-27 11:45:00	Joint pain, swelling	Rheumatoid Arthritis	Cancelled
	10005	107	1	2023-09-30	2023-10-01 10:00:00	Severe headaches,nausea	Migraine	NULL
	10006	111	12	2023-10-02	2023-10-09 18:30:00	Memory loss, cognitive decline	Alzheimer's Disease	Completed
	10007	120	2	2023-10-07	2023-10-15 11:30:00	Memory loss	Alzheimer's Disease	Unconfirmed

appointment 18 x Apply

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 34	13:54:19	SELECT * FROM appointment WHERE NOT Concern = 'Diabetes Mellit...	11 row(s) returned	0.000 sec / 0.000 sec

➤ COMPARISON OPERATORS

- SMALLER THAN (<) –
DISPLAY DETAILS OF PATIENTS WHOSE AGE IS SMALLER THAN 15

337 • `SELECT * FROM patients WHERE Age < 15;`

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: |

P_ID	P_Name	Gender	age	Address	Email	DOB	Phone_No
102	Amar Navale	Male	8	201, Shree Sai Dham, 90 Feet Road, Jhulelal Ch...	amarnavale@gmail.com	2015-09-18	9123456789
104	Sakshi Jadhav	Female	11	1/1a, Shah Niwas, Zakaria Road, Malad(w)	sakshijadhav@gmail.com	2012-03-09	7654321098
106	Sneha Gore	Female	13	18, Lila Mandir, Pestom Sagar Rd-4, Opp Shope...	NULL	2010-09-09	8765123459
107	Sapna Chandan	Female	14	K K Marg, 560 Rasul Compound, Jacob Circle	NULL	2009-07-25	7651234980
110	Himanshu Singh	Male	6	Silvadwel Ground Flo Silvadwel, 3 Silvadwel 447 ...	himanshusingh22@gmail.com	2017-04-10	8432274925
118	Sahil Dalvi	Male	8	4-1-602, Troop Bazar, Hyderabad	NULL	2015-01-25	8086963081

patients 19 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 35	13:54:20	SELECT * FROM patients WHERE Age < 15 LIMIT 0, 1000	9 row(s) returned	0.000 sec / 0.000 sec

- GREATER THAN (>) —
DISPLAY DETAILS OF APPOINTMENT HAVE SCHEDULED THE APPOINTMENT AFTER
'2023-09-30'

339 • `SELECT * FROM appointment where A_Date_Time > '2023-09-30';`

Result Grid

	A_ID	P_ID	D_ID	Created_Date	A_Date_Time	Symptoms	Concern	Attends_Status
▶	10005	107	1	2023-09-30	2023-10-01 10:00:00	Severe headaches,nausea	Migraine	NULL
	10006	111	12	2023-10-02	2023-10-09 18:30:00	Memory loss, cognitive decline	Alzheimer's Disease	Completed
	10007	120	2	2023-10-07	2023-10-15 11:30:00	Memory loss	Alzheimer's Disease	Unconfirmed
	10008	126	5	2023-10-07	2023-10-08 19:00:00	Joint pain, stiffness	Rheumatoid Arthritis	NULL
	10009	139	18	2023-10-07	2023-10-12 12:25:00	Fever, cough, sore throat	Influenza	Completed
	10010	127	12	2023-10-10	2023-10-14 17:00:00	Jaundice, fatigue, abdominal pain	Hepatitis C	Rescheduled

appointment 20 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 36	13:54:22	SELECT * FROM appointment where A_Date_Time > '2023-09-30' LIM...	8 row(s) returned	0.000 sec / 0.000 sec

- SMALLER THAN OR EQUAL TO (<=) –
DISPLAY DETAILS OF DOCTORS WHO HAVE CHARGED LESS THAN OR EQUAL TO 1500

341 • `SELECT * FROM bill where Doc_Charges <= 1500;`

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: |

	B_ID	P_ID	D_ID	Doc_Charges	Sep_Charges	Total_Charges
▶	901	101	1	1500	45000	NULL
	902	102	16	1500	11880	NULL
	903	103	18	1000	2500	NULL
	907	107	1	1500	43500	NULL
	908	108	4	1500	20000	NULL
	909	109	13	1000	5000	NULL

bill 21 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 37	13:54:24	<code>SELECT * FROM bill where Doc_Charges <= 1500 LIMIT 0, 1000</code>	22 row(s) returned	0.000 sec / 0.000 sec

- GREATER THAN OR EQUAL TO (>=)—
DISPLAY DETAILS OF DOCTORS WHO HAVE CHARGED MORE THAN OR EQUAL TO 2000

343 • `SELECT * FROM bill where Doc_Charges >= 2000;`

Result Grid

	B_ID	P_ID	D_ID	Doc_Charges	Sep_Charges	Total_Charges
▶	904	104	20	2000	75000	NULL
	905	105	17	2000	35000	NULL
	906	106	15	2250	75000	NULL
	915	115	10	2000	4499	NULL
	916	116	11	2000	45000	NULL
	917	117	8	2000	65500	NULL

bill 22 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
38	13:54:27	<code>SELECT * FROM bill where Doc_Charges >= 2000 LIMIT 0, 1000</code>	16 row(s) returned	0.000 sec / 0.000 sec

- NOT EQUAL TO (!=) —
DISPLAY DETAILS OF APPOINTMENT WHOSE CONCERN NOT 'ALZHEIMER'S DISEASE'

345 • `SELECT * FROM appointment WHERE Concern != 'Alzheimer\'s Disease';`

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: |

	A_ID	P_ID	D_ID	Created_Date	A_Date_Time	Symptoms	Concern	Attends_Status
▶	10001	124	1	2023-09-15	2023-09-19 15:00:00	Increased thirst, frequent urination	Diabetes Mellitus	Did not attend
	10002	117	8	2023-09-17	2023-09-17 13:00:00	Lumps and fatigue	Cancer	Completed
	10003	109	13	2023-09-26	2023-09-27 19:30:00	coughing, shortness of breath	Asthma	Completed
	10004	130	5	2023-09-26	2023-09-27 11:45:00	Joint pain, swelling	Rheumatoid Arthritis	Cancelled
	10005	107	1	2023-09-30	2023-10-01 10:00:00	Severe headaches,nausea	Migraine	NULL
	10008	126	5	2023-10-07	2023-10-08 19:00:00	Joint pain, stiffness	Rheumatoid Arthritis	NULL

appointment 23 x Apply

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 39	13:54:29	SELECT * FROM appointment WHERE Concern != 'Alzheimer\'s Disease...	10 row(s) returned	0.000 sec / 0.000 sec

- EQUAL TO (=) —
DISPLAY DETAILS OF PATIENT WHOSE P_ID IS 121

347 • `SELECT * FROM patients WHERE P_ID = 121;`
348

< >

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: |

	P_ID	P_Name	Gender	age	Address	Email	DOB	Phone_No
▶	121	Arohi Shivkar	Female	56	10, Soni Chambers, Ag Street, Opera House, M...	arohishivkar@yahoo.com	1967-08-22	8704904943
•	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

patients 28 x Apply

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 49	14:03:56	SELECT * FROM patients WHERE P_ID = 121 LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec

➤ ARITHMETIC OPEARATORS

- ADD (+) —

ADD DOC_CHARGES AND SEP_CHARGES AS TOATL_BILL FROM BILL TABLE

The screenshot shows a database query interface. At the top, the SQL query is entered: `SELECT Doc_Charges + Sep_Charges as Total_Bill FROM bill;`. Below the query, the 'Result Grid' is displayed, showing a single column 'Total_Bill' with 40 rows of numerical values. The values include 46500, 13380, 3500, 77000, 37000, 77250, 45000, 21500, and 6000. To the right of the grid, there are buttons for 'Result Grid', 'Form Editor', and 'Read Only'. Below the grid, the 'Output' section shows the 'Action Output' table, which contains one row indicating that the query was successful and returned 40 rows.

#	Time	Action	Message	Duration / Fetch
54	14:04:44	SELECT Doc_Charges + Sep_Charges as Total_Bill FROM bill LIMIT 0,...	40 row(s) returned	0.000 sec / 0.000 sec

- SUBTRACT (-) —
RETURN THE VALUE OF 3000 MINUS 535

351 • SELECT (3000-535) AS Subtraction;

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

	Subtraction
▶	2465

Result 38 x Read Only

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 59	14:06:11	SELECT (3000-535) AS Subtraction LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec

- MULTIPLY (*) —
RETURN THE MULTIPLICATION OF 97 AND 53

353 • `SELECT (97*53) AS Multiplication;`

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

	Multiplication
▶	5141

Result 43 x Read Only

Output

Action Output

#	Time	Action	Message	Duration / Fetch
64	14:07:33	SELECT (97*53) AS Multiplication LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec

- MODULO (%) —
RETURN THE REMAINDER OF 64 DIVIDE BY 9

355 • SELECT (64%9) AS REMAINDER;

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

REMAINDER
1

Result 50 x Read Only

Output

Action Output

#	Time	Action	Message	Duration / Fetch
71	14:08:09	SELECT (64%9) AS REMAINDER LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec

- DIVIDE (/) –
RETURN THE VALUE OF 590 DIVIDE BY 3

357 • `SELECT (590/3) AS Division;`

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

Division
196.6667

Result 55 x Read Only

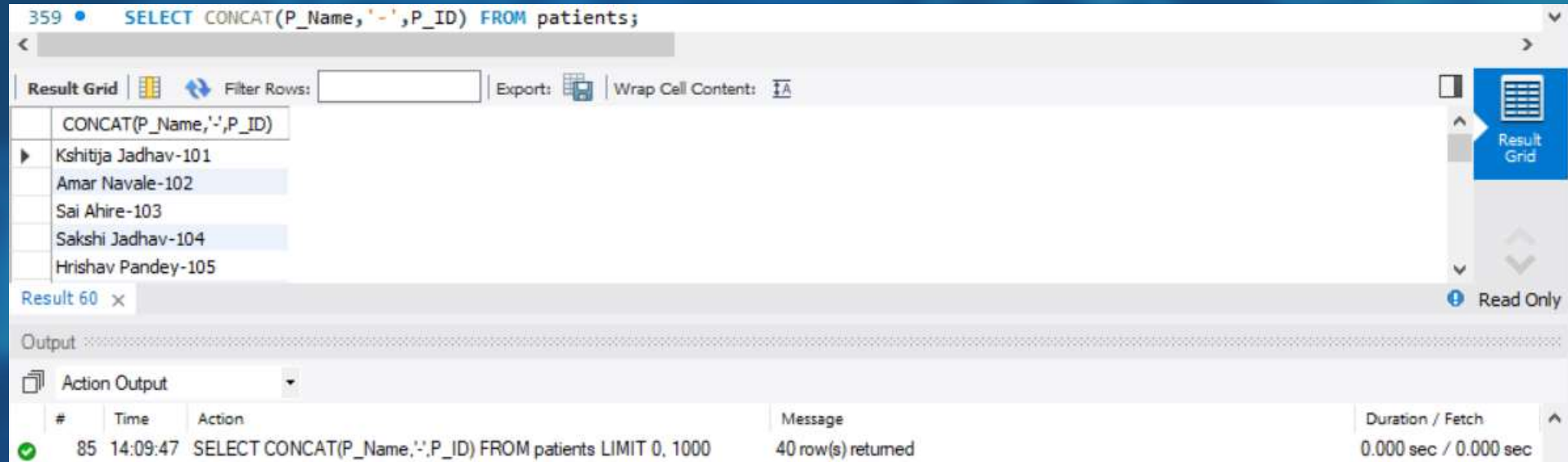
Output

Action Output

#	Time	Action	Message	Duration / Fetch
76	14:08:42	<code>SELECT (590/3) AS Division LIMIT 0, 1000</code>	1 row(s) returned	0.000 sec / 0.000 sec

➤ STRING FUNCTION

- CONCAT –
DISPLAY NAME AND ID OF PATIENTS IN A SINGLE COLUMN



The screenshot displays a database query execution window. At the top, the SQL query is: `SELECT CONCAT(P_Name, '-', P_ID) FROM patients;`. Below the query, the 'Result Grid' tab is active, showing a single column with the concatenated names and IDs of patients. The results are: Kshitija Jadhav-101, Amar Navale-102, Sai Ahire-103, Sakshi Jadhav-104, and Hrishav Pandey-105. The 'Output' section at the bottom shows the execution details: 40 row(s) returned, with a duration of 0.000 sec / 0.000 sec.

#	Time	Action	Message	Duration / Fetch
85	14:09:47	SELECT CONCAT(P_Name, '-', P_ID) FROM patients LIMIT 0, 1000	40 row(s) returned	0.000 sec / 0.000 sec

- LOWER –
DISPLAY THE NAMES OF DOCTORS IN LOWER CASE

361 • `SELECT LOWER(D_Name) FROM doctor;`

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

LOWER(D_Name)
ashish prajapati
sandeep kadam
harish bhachav
ravi gowda
vivek rane

Result 65 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
90	14:10:17	SELECT LOWER(D_Name) FROM doctor LIMIT 0, 1000	20 row(s) returned	0.000 sec / 0.000 sec

- UPPER –
DISPLAY SPECIALIST FROM DOCTOR IN UPPER CASE

363 • `SELECT UPPER(Specialist) FROM doctor;`

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

UPPER(Specialist)
DIABETES MELLITUS
ALZHEIMER'S DISEASE
GASTROESOPHAGEAL REFLUX DISEASE
BACTERIAL INFECTIONS
RHEUMATOID ARTHRITIS

Result 70 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
95	14:11:15	SELECT UPPER(Specialist) FROM doctor LIMIT 0, 1000	20 row(s) returned	0.016 sec / 0.000 sec

- REPLACE —
REPLACE THE SMALL WITH CAPITAL 'R' OF M_NAME FROM MEDICINE TABLE

365 • `SELECT REPLACE(M_Name, 'r', 'R') FROM medicine;`

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

REPLACE(M_Name, 'r', 'R')
Insulin Injection
MetfoRmin 500 Mg Tablets
Glupin CR SulfonyluRea Glipizide
KeytRuda 100mg Vial Of 4ml Injection
HERCEPTIN 440MG INJ
Cefton 1g injection
Exelon 1.5mg Capsule 14'S
Memantine HydRochloRide 10 Mg Tablets
MethotRexate Tablets Io 2.5 Mo

Result 75 x Read Only

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 100	14:11:46	SELECT REPLACE(M_Name, 'r', 'R') FROM medicine LIMIT 0, 1000	37 row(s) returned	0.000 sec / 0.000 sec

- REVERSE —
REVERSE THE M_Type FROM MEDICINE TABLE

367 • `SELECT REVERSE(M_Type) FROM medicine;`

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

REVERSE(M_Type)
sutlleM setebaiD
sutlleM setebaiD
sutlleM setebaiD
recnaC
recnaC
sitidneppA
esaesiD s'remiehzlA
esaesiD s'remiehzlA
sitirhtrA diotamuehR
sitirhtrA diotamuehR

Result 80 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
105	14:13:12	SELECT REVERSE(M_Type) FROM medicine LIMIT 0, 1000	37 row(s) returned	0.000 sec / 0.000 sec

- LENGTH —
DISPLAY THE LENGTH OF M_Type FROM MEDICINE TABLE

369 • `SELECT LENGTH(M_Type) FROM medicine;`

Result Grid | Filter Rows: | Export: | Wrap Cell Contents: |

	LENGTH(M_Type)
▶	17
	17
	17
	6
	6
	12
	19
	19
	20
	20

Result 85 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 110	14:13:51	SELECT LENGTH(M_Type) FROM medicine LIMIT 0, 1000	37 row(s) returned	0.000 sec / 0.000 sec

- INSTR —
DISPLAY THE OCCURRENCE OF COMMA(,) IN MED_NAME FROM PRESCRIPTION
TABLE

The screenshot shows a database query tool interface. At the top, the SQL query is: `SELECT INSTR(Med_Name,',') FROM prescription;`. Below the query, there's a toolbar with options like 'Result Grid', 'Filter Rows', 'Export', and 'Wrap Cell Content'. The main area displays the 'Result Grid' with a single column titled 'INSTR(Med_Name,',')'. The first row is highlighted, showing a value of 0. Below this, there are several other rows with values 0, 27, 0, 32, 0, 0, 0, 0, and 0. On the right side, there's a sidebar with icons for 'Result Grid', 'Form Editor', and 'Field Types'. At the bottom, there's an 'Output' section with a table showing the execution details.

#	Time	Action	Message	Duration / Fetch
115	14:15:18	SELECT INSTR(Med_Name,',') FROM prescription LIMIT 0, 1000	40 row(s) returned	0.000 sec / 0.000 sec

- SUBSTR –
DISPLAY THE MED_NAME WITHIN THE INDEX OF 1 TO 7 FROM PRESCRIPTION
TABLE

373 • `SELECT SUBSTR(Med_Name,1,7) FROM prescription;`

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

SUBSTR(Med_Name,1,7)
HERCEPT
Methotr
Epclusa
Metform
Suminat
Melphal
HERCEPT
Keytrud
Exelon
Ibuprof

Result 95 x Read Only

Output

Action Output

#	Time	Action	Message	Duration / Fetch
120	14:15:58	SELECT SUBSTR(Med_Name,1,7) FROM prescription LIMIT 0, 1000	40 row(s) returned	0.000 sec / 0.000 sec

- LTRIM —
DISPLAY THE NAMES OF PATIENT AFTER REMOVING THE LEFT BLANK SPACE

375 • `SELECT LTRIM(P_Name) FROM patients;`

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

LTRIM(P_Name)
Kshitija Jadhav
Amar Navale
Sai Ahire
Sakshi Jadhav
Hrishav Pandey
Sneha Gore
Sapna Chandan
Kartik Singh
Sahil Yadav
Himanshu Singh

Result 100 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
125	14:18:16	SELECT LTRIM(P_Name) FROM patients LIMIT 0, 1000	40 row(s) returned	0.000 sec / 0.000 sec

- RTRIM —
DISPLAY THE NAMES OF PATIENT AFTER REMOVING THE RIGHT BLANK SPACE

377 • `SELECT RTRIM(P_Name) FROM patients;`

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

RTRIM(P_Name)
Kshitija Jadhav
Amar Navale
Sai Ahire
Sakshi Jadhav
Hrishav Pandey
Sneha Gore
Sapna Chandan
Kartik Singh
Sahil Yadav
Himanshu Singh

Result 105 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 130	14:19:07	SELECT RTRIM(P_Name) FROM patients LIMIT 0, 1000	40 row(s) returned	0.000 sec / 0.000 sec

- TRIM —
DISPLAY THE NAMES OF PATIENT AFTER REMOVING THE BLANK SPACES OF BOTH
LEFT AND RIGHT SIDES

The screenshot shows a database query editor interface. At the top, the query is: `SELECT TRIM(P_Name) FROM patients;`. Below the query, there's a toolbar with options like 'Result Grid', 'Filter Rows', 'Export', and 'Wrap Cell Content'. The main area displays a list of patient names with the first one expanded. To the right, there are icons for 'Result Grid', 'Form Editor', and 'Field Types'. At the bottom, there's an 'Output' section with a tab for 'Action Output'.

Result Grid

TRIM(P_Name)
Kshitija Jadhav
Amar Navale
Sai Ahire
Sakshi Jadhav
Hrishav Pandey
Sneha Gore
Sapna Chandan
Kartik Singh
Sahil Yadav
Himanshu Singh

Result 111 x

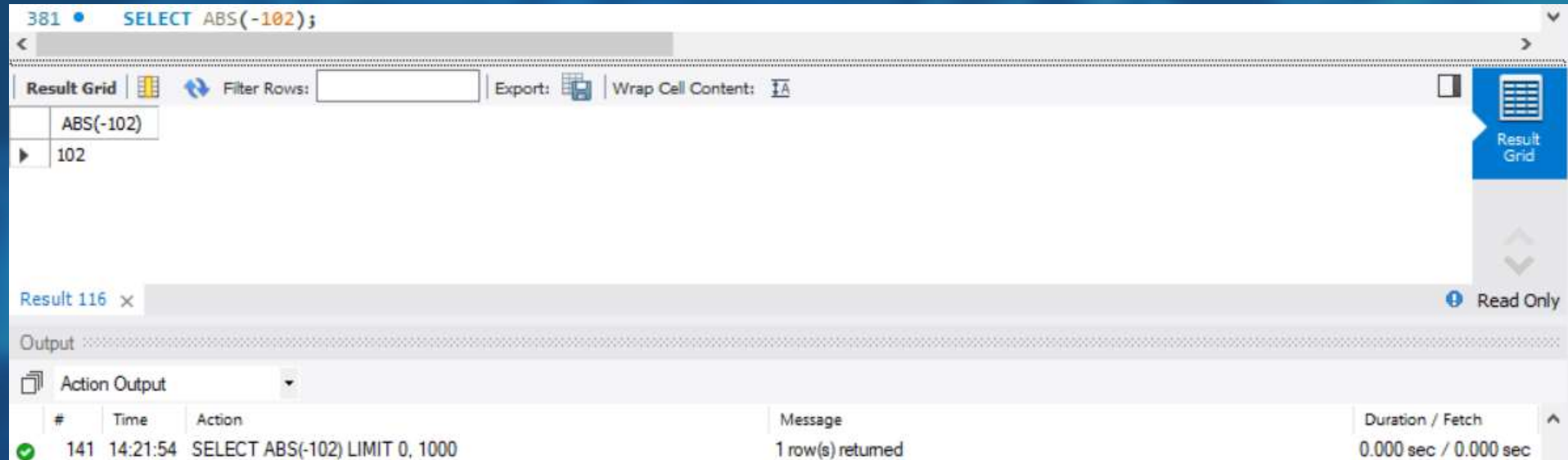
Output

Action Output

#	Time	Action	Message	Duration / Fetch
136	14:19:52	SELECT TRIM(P_Name) FROM patients LIMIT 0, 1000	40 row(s) returned	0.000 sec / 0.000 sec

➤ MATH FUNCTION

- ABS –
RETURN THE ABSOLUTE VALUE OF (-102)



The screenshot displays a SQL query execution window. At the top, the query is `SELECT ABS(-102);`. Below the query, there is a toolbar with options like 'Result Grid', 'Filter Rows', 'Export', and 'Wrap Cell Content'. The 'Result Grid' is active, showing a single row with the value 102. Below the result grid, there is a section for 'Output' and 'Action Output'. The 'Action Output' section shows a table with columns: #, Time, Action, Message, and Duration / Fetch. The table contains one row indicating the successful execution of the query.

#	Time	Action	Message	Duration / Fetch
141	14:21:54	SELECT ABS(-102) LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec

- MOD —
RETURN THE REMAINDER OF 31 DIVIDE BY 3

383 • `SELECT MOD(31,3);`

Result Grid

	MOD(31,3)
▶	1

Result 122 x Read Only

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 147	14:22:27	SELECT MOD(31,3) LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec

- CEIL —
RETURN THE LARGEST BUT THE CLOSEST INTEGER VALUE OF TOTAL_AMOUNT
FROM MEDICINE_BILL TABLE

The screenshot shows a database query interface. At the top, a query editor displays the SQL statement: `SELECT CEIL(Total_Amount) FROM medicine_bill;`. Below the editor, a toolbar includes options for 'Result Grid', 'Filter Rows', 'Export', and 'Wrap Cell Content'. The 'Result Grid' tab is active, showing a table with one column, 'CEIL(Total_Amount)', and five rows of values: 3930, 300, 150, 334, and 49. To the right of the grid is a 'Result Grid' button. Below the grid, a status bar indicates 'Result 128' and 'Read Only'. The bottom section is labeled 'Output' and contains an 'Action Output' dropdown. Below this is a table with columns: '#', 'Time', 'Action', 'Message', and 'Duration / Fetch'. A single row shows a successful execution at 14:22:58, returning 20 rows.

#	Time	Action	Message	Duration / Fetch
153	14:22:58	SELECT CEIL(Total_Amount) FROM medicine_bill LIMIT 0, 1000	20 row(s) returned	0.000 sec / 0.000 sec

- FLOOR —
RETURN THE SMALLEST BUT THE CLOSEST INTEGER VALUE OF TOTAL_AMOUNT
FROM MEDICINE_BILL TABLE

The screenshot shows a SQL IDE interface. At the top, a query editor displays the SQL statement: `SELECT FLOOR(Total_Amount) FROM medicine_bill;`. Below the editor, a toolbar includes options for 'Result Grid', 'Filter Rows', 'Export', and 'Wrap Cell Content'. The 'Result Grid' is active, showing a table with one column, 'FLOOR(Total_Amount)', and several rows of values: 3930, 300, 150, 334, and 49. To the right of the grid is a 'Result Grid' button. Below the grid, a tab labeled 'Result 133' is visible. The bottom section of the IDE is labeled 'Output' and contains an 'Action Output' table. This table has columns for '#', 'Time', 'Action', 'Message', and 'Duration / Fetch'. It contains one entry: a green checkmark in the '#' column, '158' in 'Time', '14:23:27' in 'Action', 'SELECT FLOOR(Total_Amount) FROM medicine_bill LIMIT 0, 1000' in 'Message', and '20 row(s) returned' in 'Duration / Fetch'.

#	Time	Action	Message	Duration / Fetch
✓ 158	14:23:27	SELECT FLOOR(Total_Amount) FROM medicine_bill LIMIT 0, 1000	20 row(s) returned	0.000 sec / 0.000 sec

- TRUNCATE –
RETURN THE TOTAL_AMOUNT WITH SINGLE DECIMAL VALUE FROM
MEDICINE_BILL TABLE

389 • `SELECT TRUNCATE(Total_Amount,1) FROM medicine_bill;`

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

TRUNCATE(Total_Amount,1)
3930
300
150
334
49

Result 138 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 163	14:24:00	SELECT TRUNCATE(Total_Amount,1) FROM medicine_bill LIMIT 0, 10...	20 row(s) returned	0.000 sec / 0.000 sec

- EXP —
RETURN THE EXPONENTIAL VALUE OF 4

391 • `SELECT EXP(4);`

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

	EXP(4)
▶	54.598150033144236

Result 143 x Read Only

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 168	14:24:44	SELECT EXP(4) LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec

- POW —
RETURN THE VALUE OF 8 RAISE TO 6

393 • `SELECT POW(8,6);`

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

	POW(8,6)
▶	262144

Result 148 x Read Only

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 173	14:25:14	SELECT POW(8,6) LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec

- SQRT –
RETURN THE SQUARE ROOT OF 324

395 • `SELECT SQRT(324);`

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

	SQRT(324)
▶	18

Result 153 x Read Only

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 178	14:25:53	SELECT SQRT(324) LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec

➤ DATE FUNCTION

- CURDATE —
DISPLAY THE CURRENT DATE

The screenshot shows a SQL query execution window. At the top, the query is `SELECT CURDATE();`. Below the query, there is a toolbar with options like "Result Grid", "Filter Rows", "Export", and "Wrap Cell Content". The "Result Grid" is displayed, showing a single column named "CURDATE()" with the value "2023-10-14". To the right of the grid is a "Result Grid" button. Below the grid, there is a "Result 158" tab and a "Read Only" indicator. The "Output" section shows the query execution details. The "Action Output" dropdown is set to "Action Output". The output table has columns: #, Time, Action, Message, and Duration / Fetch. The first row shows a successful execution of the query.

#	Time	Action	Message	Duration / Fetch
183	14:26:24	SELECT CURDATE() LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec

- NOW —
DISPLAY THE CURRENT DATE ALONG WITH THE TIME

The screenshot shows a database query interface. At the top, the query `SELECT NOW();` is entered. Below the query, the 'Result Grid' tab is active, displaying a single row with the value `2023-10-14 14:26:55`. The interface includes a toolbar with options like 'Filter Rows', 'Export', and 'Wrap Cell Content'. Below the result grid, there is a section for 'Action Output' which shows a table of execution details.

#	Time	Action	Message	Duration / Fetch
188	14:26:50	SELECT NOW() LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec

- SYSDATE —
DISPLAY THE DATE AND TIME OF THE SYSTEM YOU ARE WORKING ON

The screenshot shows a database query interface. At the top, a query editor displays the SQL statement `SELECT SYSDATE();`. Below the editor, a toolbar includes options for 'Result Grid', 'Filter Rows', 'Export', and 'Wrap Cell Content'. The 'Result Grid' is active, showing a single row with the value '2023-10-14 14:29:43'. Below the result grid, there is a section for 'Output' and 'Action Output'. The 'Action Output' section shows a table with columns: '#', 'Time', 'Action', 'Message', and 'Duration / Fetch'. A single row is displayed with a green checkmark icon, indicating successful execution.

#	Time	Action	Message	Duration / Fetch
193	14:29:40	SELECT SYSDATE() LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec

- LAST_DAY –
DISPLAY THE LAST DATE OF THE DOB FROM PATIENTS TABLE

403 • `SELECT LAST_DAY(DOB) FROM patients;`

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

	LAST_DAY(DOB)
▶	2003-10-31
	2015-09-30
	2006-02-28
	2012-03-31
	1985-02-28

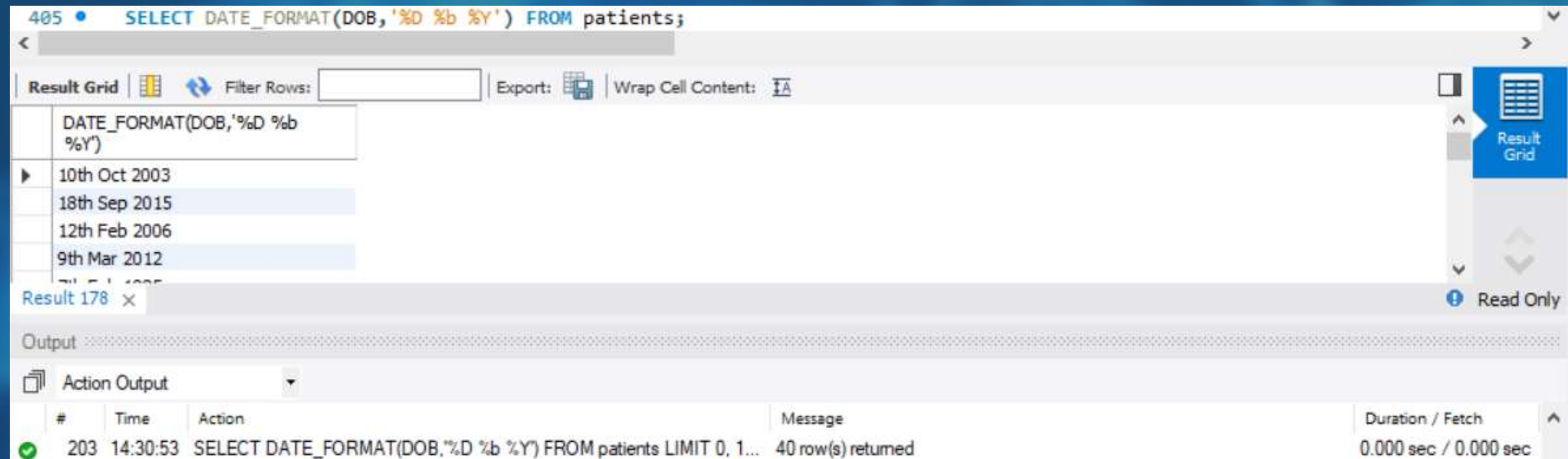
Result 173 x Read Only

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 198	14:30:09	SELECT LAST_DAY(DOB) FROM patients LIMIT 0, 1000	40 row(s) returned	0.000 sec / 0.000 sec

- DATE_FORMAT —
DISPLAY THE DOB FROM PATIENTS IN THE FORMAT OF DATE FOLLOWED BY
SUFFIX, ABBREVIATED MONTH NAME AND YEAR IN 4 DIGITS



The screenshot shows a SQL query execution window. The query is `SELECT DATE_FORMAT(DOB, '%D %b %Y') FROM patients;`. The results are displayed in a grid format. The first column is the query text, and the second column is the formatted date. The dates shown are 10th Oct 2003, 18th Sep 2015, 12th Feb 2006, and 9th Mar 2012. The interface includes a 'Result Grid' tab, a 'Filter Rows' input, and an 'Export' button. The 'Output' section shows the execution details, including the number of rows returned (40 row(s) returned) and the duration (0.000 sec / 0.000 sec).

DATE_FORMAT(DOB, '%D %b %Y')
10th Oct 2003
18th Sep 2015
12th Feb 2006
9th Mar 2012

Result 178 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
203	14:30:53	SELECT DATE_FORMAT(DOB, '%D %b %Y') FROM patients LIMIT 0, 1...	40 row(s) returned	0.000 sec / 0.000 sec

- DATEDIFF –
DISPLAY THE DATE DIFFERENCE BETWEEN THE CURDATE() AND DOB OF
PATIENTS TABLE

The screenshot shows a database query tool interface. At the top, the query editor displays the SQL statement: `SELECT DATEDIFF(CURDATE(),DOB) FROM patients;`. Below the query editor, the 'Result Grid' tab is active, showing a list of 40 rows of results. The first few rows are visible: 7309, 2948, 6453, 4236, 14128, 4783, 5194, and 11168. To the right of the result grid, there are buttons for 'Result Grid' and 'Form Editor'. Below the result grid, the 'Output' section is visible, showing a table with columns: #, Time, Action, Message, and Duration / Fetch. The table contains one row of data: # 218, Time 14:32:39, Action SELECT DATEDIFF(CURDATE(),DOB) FROM patients LIMIT 0, 1000, Message 40 row(s) returned, and Duration / Fetch 0.000 sec / 0.000 sec.

#	Time	Action	Message	Duration / Fetch
218	14:32:39	SELECT DATEDIFF(CURDATE(),DOB) FROM patients LIMIT 0, 1000	40 row(s) returned	0.000 sec / 0.000 sec

- MONTH —
DISPLAY THE MONTH OF BIRTH FROM PATIENTS TABLE

409 • `SELECT MONTH(DOB) FROM patients;`

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

MONTH(DOB)
10
9
2
3
2
9
7
3

Result 198 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 223	14:33:26	SELECT MONTH(DOB) FROM patients LIMIT 0, 1000	40 row(s) returned	0.000 sec / 0.000 sec

- YEAR —
DISPLAY THE YEAR OF BIRTH FROM PATIENTS TABLE

411 • `SELECT YEAR(DOB) FROM patients;`

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

YEAR(DOB)
2003
2015
2006
2012
1985
2010
2009
1999

Result 203 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 228	14:34:03	SELECT YEAR(DOB) FROM patients LIMIT 0, 1000	40 row(s) returned	0.000 sec / 0.000 sec

➤ AGGREGATE FUNCTION

- SUM –

DISPLAY THE SUM OF THE TOTAL_AMOUNT FROM MEDICINE_BILL





The screenshot displays a database query interface. At the top, a query editor shows the SQL statement: `SELECT SUM(Total_Amount) FROM medicine_bill;`. Below the editor, a toolbar includes options for 'Result Grid', 'Filter Rows', 'Export', and 'Wrap Cell Content'. The 'Result Grid' is active, showing a single row with the column header 'SUM(Total_Amount)' and the value '108102'. To the right of the grid is a 'Result Grid' button. Below the grid, a tab labeled 'Result 208' is visible, with a 'Read Only' indicator. The 'Output' section shows 'Action Output' with a table of execution details.

#	Time	Action	Message	Duration / Fetch
✓ 239	14:35:36	SELECT SUM(Total_Amount) FROM medicine_bill LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec


- AVG —
DISPLAY THE AVERAGE OF THE TOTAL_AMOUNT FROM MEDICINE BILL



415 • `SELECT AVG(Total_Amount) FROM medicine_bill;`

< >



Result Grid   Filter Rows: Export:  Wrap Cell Content: 

	AVG(Total_Amount)
▶	5405.1000

Result Grid 

Result 213 x   Read Only

Output

 Action Output 

#	Time	Action	Message	Duration / Fetch
✓ 244	14:36:37	SELECT AVG(Total_Amount) FROM medicine_bill LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec

- MIN —
DISPLAY THE MINIMUM AMOUNT FROM THE MEDICINE_BILL

417 • `SELECT MIN(Total_Amount) FROM medicine_bill;`

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

MIN(Total_Amount)
20

Result 218 x Read Only

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 249	14:37:46	SELECT MIN(Total_Amount) FROM medicine_bill LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec

- MAX —
DISPLAY THE MAXIMUM AMOUNT FROM THE MEDICINE_BILL

419 • `SELECT MAX(Total_Amount) FROM medicine_bill;`

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

MAX(Total_Amount)
75475

Result 224 x Read Only

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 255	14:38:14	<code>SELECT MAX(Total_Amount) FROM medicine_bill LIMIT 0, 1000</code>	1 row(s) returned	0.000 sec / 0.000 sec

- COUNT —
DISPLAY THE COUNT OF DOCTORS PRESENT IN THE HOSPITAL

421 • `SELECT COUNT(*) FROM doctor;`

Result Grid

	COUNT(*)
▶	20

Filter Rows: Export: Wrap Cell Content:

Result 229 x Read Only

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 260	14:39:12	SELECT COUNT(*) FROM doctor LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec

➤ GROUP BY AND HAVING CLAUSE

- GROUP BY —
DISPLAY SPECIALIST AND COUNT FOR EACH SPECIALIST

The screenshot shows a database query interface. At the top, the SQL query is: `SELECT COUNT(*), Specialist FROM doctor GROUP BY Specialist;`. Below the query, there is a toolbar with options like 'Result Grid', 'Filter Rows', 'Export', and 'Wrap Cell Content'. The 'Result Grid' is active, displaying a table with two columns: 'COUNT(*)' and 'Specialist'. The table contains five rows of data. Below the table, there is a tab labeled 'Result 234'. At the bottom, there is an 'Output' section with a dropdown menu set to 'Action Output'. Below this, there is a table with four columns: '#', 'Time', 'Action', and 'Message'. The first row shows a successful execution of the query, returning 15 rows.

COUNT(*)	Specialist
2	Alzheimer's Disease
1	Appendicitis
2	Ashtma
1	Bacterial infections
3	Cancer

#	Time	Action	Message	Duration / Fetch
265	14:39:49	SELECT COUNT(*), Specialist FROM doctor GROUP BY Specialist LIM...	15 row(s) returned	0.000 sec / 0.000 sec

- GROUP BY + HAVING —
DISPLAY SPECIALIST AND COUNT FOR EACH SPECIALIST HAVING COUNT GREATER
THAN 1

425 • `SELECT COUNT(*), Specialist FROM doctor GROUP BY Specialist HAVING COUNT(*) >1;`

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

	COUNT(*)	Specialist
▶	2	Alzheimer's Disease
	2	Ashtma
	3	Cancer
	2	Diabetes Mellitus

Result 239 x Read Only

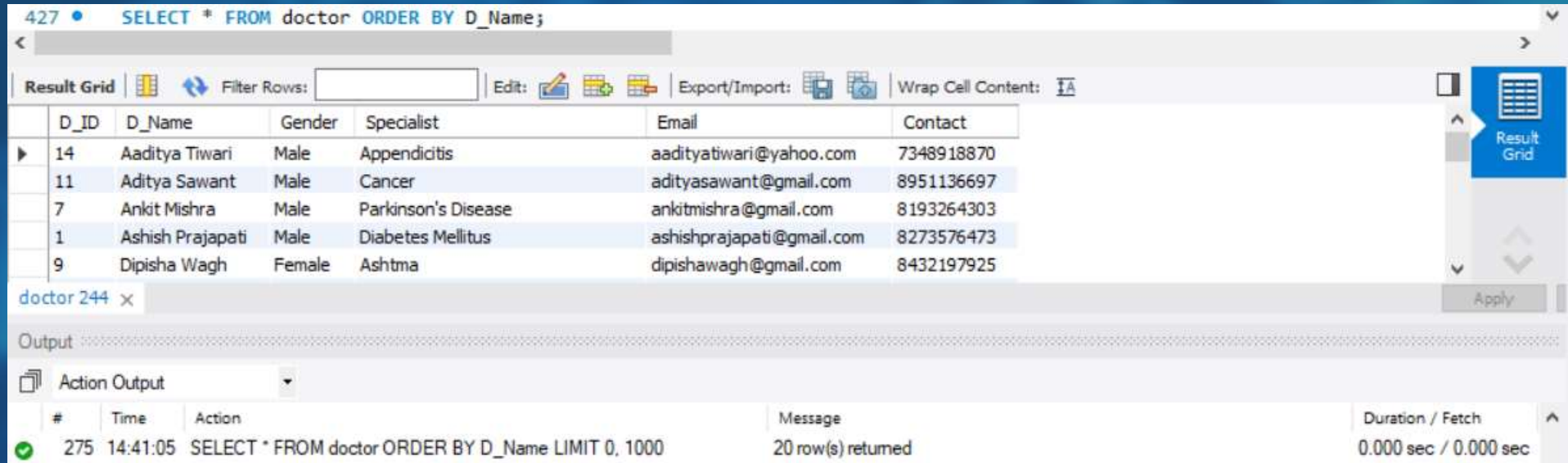
Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 270	14:40:16	SELECT COUNT(*), Specialist FROM doctor GROUP BY Specialist HA...	4 row(s) returned	0.000 sec / 0.000 sec

➤ ORDER BY CLAUSE

- ORDER BY (DEFAULT- ASC) —
DISPLAY DETAILS OF DOCTORS IN ASCENDING ORDER OF NAMES



The screenshot shows a database query interface with the following components:

- Query Editor:** The query is `SELECT * FROM doctor ORDER BY D_Name;`
- Result Grid:** A table displaying the results of the query, ordered by doctor name (D_Name) in ascending order.
- Table Data:**

	D_ID	D_Name	Gender	Specialist	Email	Contact
▶	14	Aaditya Tiwari	Male	Appendicitis	aadityatiwari@yahoo.com	7348918870
	11	Aditya Sawant	Male	Cancer	adityasawant@gmail.com	8951136697
	7	Ankit Mishra	Male	Parkinson's Disease	ankitmishra@gmail.com	8193264303
	1	Ashish Prajapati	Male	Diabetes Mellitus	ashishprajapati@gmail.com	8273576473
	9	Dipisha Wagh	Female	Ashtma	dipishawagh@gmail.com	8432197925

Below the table, the **Output** section shows the execution details:

#	Time	Action	Message	Duration / Fetch
✓ 275	14:41:05	SELECT * FROM doctor ORDER BY D_Name LIMIT 0, 1000	20 row(s) returned	0.000 sec / 0.000 sec

- ORDER BY DESC—
DISPLAY DETAILS OF DOCTORS IN DESCENDING ORDER OF SPECIALIST

429 • `SELECT * FROM doctor ORDER BY Specialist DESC;`

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: |

	D_ID	D_Name	Gender	Specialist	Email	Contact
▶	5	Vivek Rane	Male	Rheumatoid Arthritis	vivekrane@yahoo.com	8473651574
	19	Preeti Jadhav	Female	Pneumonia	preetijadhav@gamil.com	7874259064
	7	Ankit Mishra	Male	Parkinson's Disease	ankitmishra@gmail.com	8193264303
	15	Surbhi Pant	Female	Ovarian Cancer	surbhipant@yahoo.com	6316214359
	17	Jayesh Pandey	Male	Migraine	jayeshpandey@gmail.com	7444404721

doctor 249 x

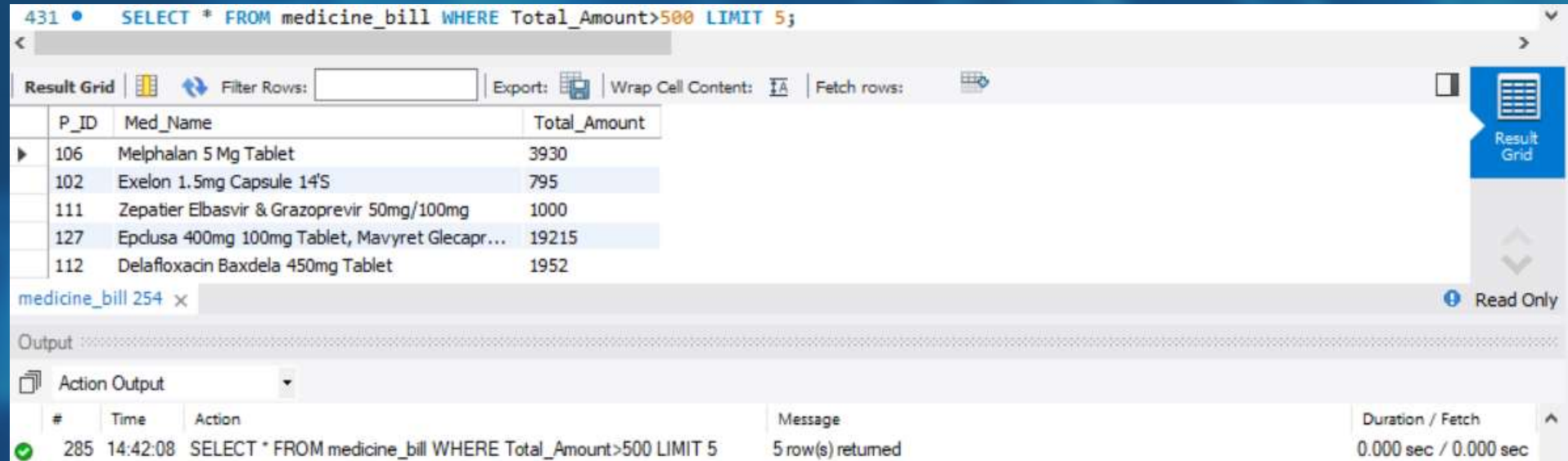
Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 280	14:41:32	SELECT * FROM doctor ORDER BY Specialist DESC LIMIT 0, 1000	20 row(s) returned	0.000 sec / 0.000 sec

➤ LIMIT CLAUSE

DISPLAY ONLY 5 RECORDS OF MEDICINE_BILL WHO PAID MORE THAN 500



The screenshot displays a database management tool interface. At the top, a SQL query is entered: `SELECT * FROM medicine_bill WHERE Total_Amount>500 LIMIT 5;`. Below the query editor, a toolbar includes options for 'Result Grid', 'Filter Rows', 'Export', 'Wrap Cell Content', and 'Fetch rows'. The 'Result Grid' is active, showing a table with 5 rows of data. The table has columns for P_ID, Med_Name, and Total_Amount. The data rows are: (106, Melphalan 5 Mg Tablet, 3930), (102, Exelon 1.5mg Capsule 14'S, 795), (111, Zepatier Elbasvir & Grazoprevir 50mg/100mg, 1000), (127, Epclusa 400mg 100mg Tablet, Mavyret Glecapr..., 19215), and (112, Delafloxacin Baxdela 450mg Tablet, 1952). Below the result grid, there is a tab labeled 'medicine_bill 254' and a 'Read Only' indicator. The 'Output' section at the bottom shows the 'Action Output' for the query, indicating that 5 row(s) were returned in 0.000 seconds.

P_ID	Med_Name	Total_Amount
106	Melphalan 5 Mg Tablet	3930
102	Exelon 1.5mg Capsule 14'S	795
111	Zepatier Elbasvir & Grazoprevir 50mg/100mg	1000
127	Epclusa 400mg 100mg Tablet, Mavyret Glecapr...	19215
112	Delafloxacin Baxdela 450mg Tablet	1952

#	Time	Action	Message	Duration / Fetch
285	14:42:08	SELECT * FROM medicine_bill WHERE Total_Amount>500 LIMIT 5	5 row(s) returned	0.000 sec / 0.000 sec

➤ UNION

DISPLAY THE ID AND NAMES OF ALL PATIENTS AND DOCTORS WITHIN TWO COLUMNS

```
433 • SELECT D_ID AS 'Patients and Doctors ID' , D_Name AS 'Patients and Doctors NAME' FROM doctor
434 UNION
435 SELECT P_ID, P_Name FROM patients;
```

Result Grid

	Patients and Doctors ID	Patients and Doctors NAME
▶	1	Ashish Prajapati
	2	Sandeep Kadam
	3	Harish Bhachav
	4	Ravi Gowda
	5	Vivek Rane
	6	Trupti Tripathi
	7	Ankit Mishra
	8	Nav Khamankar

Result 259 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 290	14:42:39	SELECT D_ID AS 'Patients and Doctors ID' , D_Name AS 'Patients and...	60 row(s) returned	0.000 sec / 0.000 sec

➤ SUB-QUERY

- SINGLE ROW SUB-QUERY —
DISPLAY P_ID AND P_NAME OF PATIENTS WHO HAVE PAID THE HIGHEST
TOTAL_AMOUNY WITHIN 10000 FROM MEDICINE_BILL

```
438 • SELECT P_ID, P_NAME FROM patients WHERE P_ID=(  
439 SELECT P_ID FROM medicine_bill WHERE Total_Amount=(  
440 SELECT MAX(Total_Amount) FROM medicine_bill WHERE Total_Amount<10000));
```

Result Grid

P_ID	P_NAME
106	Sneha Gore
NULL	NULL

patients 264 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
295	14:43:48	SELECT P_ID, P_NAME FROM patients WHERE P_ID=(SELECT P_I...	1 row(s) returned	0.000 sec / 0.000 sec

- MULTIPLE ROW SUB-QUERY —
DISPLAY THE NAME AND SPECIALIST FROM DOCTOR WHO CHARGES 2000

443 • `SELECT D_Name, Specialist FROM doctor WHERE D_ID IN (SELECT D_ID FROM bill WHERE Doc_Charges=2000);`

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

D_Name	Specialist
Harish Bhachav	Gastroesophageal Reflux Disease
Jay Khamankar	Cancer
Dipisha Wagh	Ashtma
Gurupreet Kaur	Cancer
Aditya Sawant	Cancer
Jayesh Pandey	Migraine
Jyoti Parab	Epilepsy

doctor 269 x Read Only

Output

Action Output

#	Time	Action	Message	Duration / Fetch
300	14:45:11	SELECT D_Name, Specialist FROM doctor WHERE D_ID IN (SELECT...	7 row(s) returned	0.000 sec / 0.000 sec

- MULTIPLE COLUMN SUB-QUERY —
DISPLAY THE APPOINTMENT INFO OF THE PATIENT WHO HAVE PAID MORE THAN
40000 SEP_CHARGES

446 • `SELECT * FROM appointment WHERE (P_ID, D_ID) IN (SELECT P_ID,D_ID FROM bill WHERE Sep_Charges > 40000);`

Result Grid

	A_ID	P_ID	D_ID	Created_Date	A_Date_Time	Symptoms	Concern	Attends_Status
▶	10001	124	1	2023-09-15	2023-09-19 15:00:00	Increased thirst, frequent urination	Diabetes Mellitus	Did not attend
	10002	117	8	2023-09-17	2023-09-17 13:00:00	Lumps and fatigue	Cancer	Completed
	10005	107	1	2023-09-30	2023-10-01 10:00:00	Severe headaches,nausea	Migraine	NULL
	10011	122	11	2023-10-11	2023-10-20 13:00:00	Abdominal pain lower right side	Appendicitis	Unconfirmed
	10012	132	7	2023-10-12	2023-10-16 12:15:00	Tremors, stiffness, bradykinesia	Parkinson's Disease	Confirmed
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

appointment 275 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
306	14:45:58	SELECT * FROM appointment WHERE (P_ID, D_ID) IN (SELECT P_ID...	5 row(s) returned	0.000 sec / 0.000 sec

➤ JOINS

- INNER JOIN (DEFAULT JOIN)—
DISPLAY THE A_ID, CONCERN, MED_NAME FROM APPOINTMENT AND
MEDICINE_BILL TABLE WHOSE D_ID ISN'T 5,15,20 USING JOIN

```
449 • SELECT Appointment.A_ID, Appointment.Concern, Medicine_bill.Med_Name FROM appointment
450 INNER JOIN
451 Medicine_bill
452 ON
453 Appointment.P_ID = Medicine_bill.P_ID
454 WHERE Appointment.D_ID NOT IN (5,15,20);
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

A_ID	Concern	Med_Name
10005	Migraine	Metformin 500 Mg Tablets
10006	Alzheimer's Disease	Zepatier Elbasvir & Grazoprevir 50mg/100mg
10009	Influenza	Tamiflu 75mg Strip Of 10 Capsules
10010	Hepatitis C	Eplusa 400mg 100mg Tablet, Mavyret Glecapr...

Result 284 x Read Only

Output

Action Output

#	Time	Action	Message	Duration / Fetch
315	14:48:58	SELECT Appointment.A_ID, Appointment.Concern, Medicine_bill.Med_...	4 row(s) returned	0.000 sec / 0.000 sec

- OUTER JOIN —
DISPLAY THE D_ID, CREATED_DATE AND CONCERN FROM BILL AND
APPOINTMENT TABLE USING LEFT JOIN

```
459 • SELECT Bill.D_ID, Appointment.Created_Date, Appointment.Concern FROM Bill
460 LEFT OUTER JOIN
461 Appointment
462 ON
463 Appointment.P_ID=Bill.P_ID;
```

Result Grid

	D_ID	Created_Date	Concern
▶	1	NULL	NULL
	16	NULL	NULL
	18	NULL	NULL
	20	NULL	NULL
	17	NULL	NULL
	15	NULL	NULL
	1	2023-09-30	Migraine
	4	NULL	NULL
	12	2023-09-30	Headache

Result 289 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 320	14:50:07	SELECT Bill.D_ID, Appointment.Created_Date, Appointment.Concern F...	40 row(s) returned	0.000 sec / 0.000 sec

DISPLAY THE CONCERN, P_ID AND P_NAME FROM APPOINTMENT AND PATIENTS TABLE USING RIGHT JOIN

```
467 • SELECT Appointment.Concern, Patients.P_ID, Patients.P_Name FROM Appointment
468 RIGHT OUTER JOIN
469 Patients
470 ON Appointment.P_ID=Patients.P_ID;
```

Result Grid

	Concern	P_ID	P_Name
▶	NULL	101	Kshitija Jadhav
	NULL	102	Amar Navale
	NULL	103	Sai Ahire
	NULL	104	Sakshi Jadhav
	NULL	105	Hrishav Pandey
	NULL	106	Sneha Gore
	Migraine	107	Sapna Chandan
	NULL	108	Kartik Singh

Result 294 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 325	14:50:53	SELECT Appointment.Concern, Patients.P_ID, Patients.P_Name FROM...	40 row(s) returned	0.000 sec / 0.000 sec

- CROSS JOIN —
DISPLAY THE A_ID, P_ID AND MED_TYPE FROM MEDICINE AND APPOINTMENT
TABLE USING CROSS JOIN

```
473 • SELECT Appointment.A_ID, Appointment.P_ID, Medicine.M_Type FROM Medicine
474 CROSS JOIN
475 Appointment
476 ON
477 Appointment.Concern=Medicine.M_Type;
```

Result Grid

	A_ID	P_ID	M_Type
▶	10001	124	Diabetes Mellitus
	10001	124	Diabetes Mellitus
	10001	124	Diabetes Mellitus
	10002	117	Cancer
	10002	117	Cancer
	10011	122	Appendicitis
	10006	111	Alzheimer's Disease
	10007	120	Alzheimer's Disease
	10006	111	Alzheimer's Disease

Result 299 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 330	14:52:30	SELECT Appointment.A_ID, Appointment.P_ID, Medicine.M_Type FRO...	23 row(s) returned	0.000 sec / 0.000 sec



THANK YOU