

Documentation queries with outputs

-- Task 2: Data Insertion and Handling Nulls

-- Database: library_management_system

USE library_management_system;

-- Insert sample Staff

INSERT INTO Staff (name) VALUES

('Anita Deshmukh'),

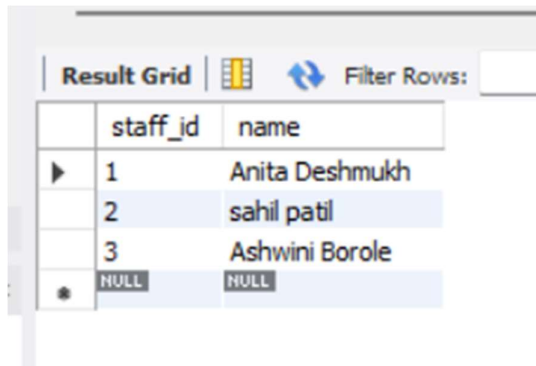
('sahil patil'),

('Ashwini Borole');

-- show table staff

select * from Staff ;

output:-



The screenshot shows a database query result grid with the following data:

	staff_id	name
▶	1	Anita Deshmukh
	2	sahil patil
	3	Ashwini Borole
•	NULL	NULL

-- Insert sample Readers (with some NULLs)

INSERT INTO Readers (first_name, middle_name, last_name, phone_no, class_name, roll_no) VALUES

('Meena', NULL, 'Patel', '9876543210', 'MCA', '23MCA01'),

('Priyanka','Ashish','Nikam','9080236575','BCA','23BCA07'),

('Ashish',NULL,'patil',NULL,'MSC IT','23MSC08'),

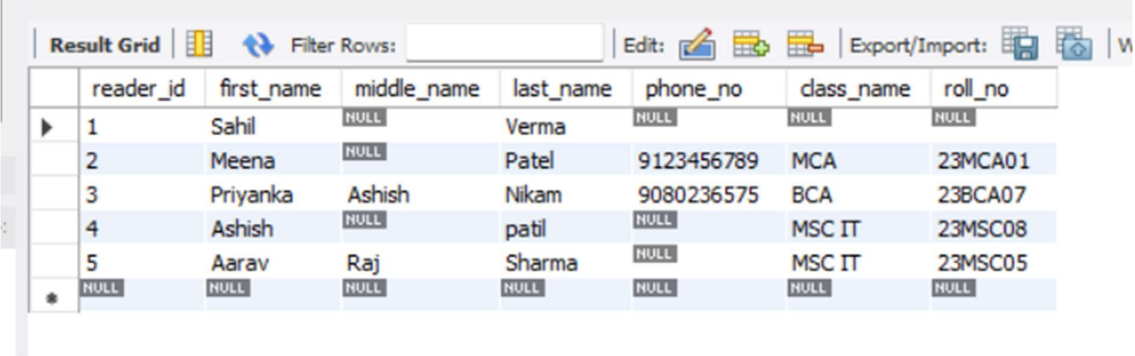
('Aarav', 'Raj', 'Sharma', NULL, 'MSC IT', '23MSC05');

Documentation queries with outputs

-- show readers table records

```
select * from Readers;
```

output:-



	reader_id	first_name	middle_name	last_name	phone_no	class_name	roll_no
▶	1	Sahil	NULL	Verma	NULL	NULL	NULL
	2	Meena	NULL	Patel	9123456789	MCA	23MCA01
	3	Priyanka	Ashish	Nikam	9080236575	BCA	23BCA07
	4	Ashish	NULL	patil	NULL	MSC IT	23MSC08
	5	Aarav	Raj	Sharma	NULL	MSC IT	23MSC05
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL

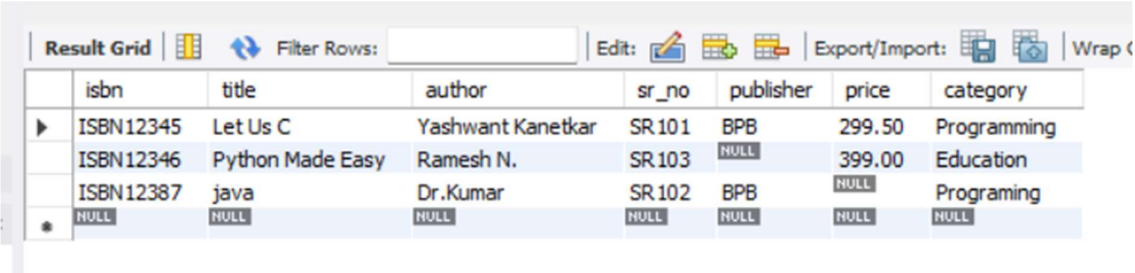
-- Insert sample Books

```
INSERT INTO Books (isbn, title, author, sr_no, publisher, price, category) VALUES  
( 'ISBN12345', 'Let Us C', 'Yashwant Kanetkar', 'SR101', 'BPB', 299.50, 'Programming'),  
( 'ISBN12387', 'java', 'Dr.Kumar', 'SR102', 'BPB', NULL, 'Programing '),  
( 'ISBN12346', 'Python Made Easy', 'Ramesh N.', 'SR103', NULL, 399.00, 'Education');
```

-- this show Books table records

```
select * from Books;
```

output:-



	isbn	title	author	sr_no	publisher	price	category
▶	ISBN12345	Let Us C	Yashwant Kanetkar	SR 101	BPB	299.50	Programming
	ISBN12346	Python Made Easy	Ramesh N.	SR 103	NULL	399.00	Education
	ISBN12387	java	Dr.Kumar	SR 102	BPB	NULL	Programing
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL

-- Insert into AuthSystem

```
INSERT INTO AuthSystem (username, password) VALUES  
( 'meena23', 'pass123'),  
( 'Priyanka123', 'priyu@123'),
```

Documentation queries with outputs

```
('Ashish123','Ashu@14'),  
('aarav99', 'secure456');
```

-- this show Authsystem table records

```
select * from AuthSystem;
```

output:-

	user_id	username	password
▶	1	meena23	pass123
	2	Priyanka123	priyu@123
	3	Ashish123	Ashu@14
	4	aarav99	secure456
✱	NULL	NULL	NULL

-- Insert sample Issues

```
INSERT INTO Issue (reader_id, isbn, staff_id, issue_date) VALUES
```

```
(1, 'ISBN12345', 1, '2025-08-01'),  
(2, 'ISBN12387', 2, '2025-08-02'),  
(3, 'ISBN12346', 3, '2025-08-03');
```

-- this query show all reader issues book records

```
select * from Issue ;
```

output:-

	issue_id	reader_id	isbn	staff_id	issue_date
▶	1	1	ISBN12345	1	2025-08-01
	2	2	ISBN12387	2	2025-08-02
	3	3	ISBN12346	3	2025-08-03
✱	NULL	NULL	NULL	NULL	NULL

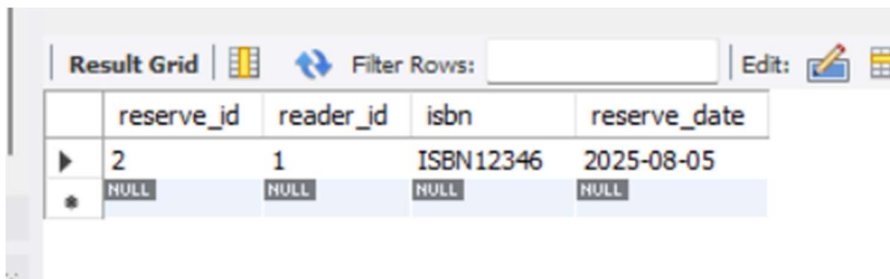
-- Insert sample Reserves

```
INSERT INTO Reserve (reader_id, isbn, reserve_date) VALUES  
(1, 'ISBN12346', '2025-08-05');
```

-- shows reserve or book buying date and their id

```
select * from Reserve;
```

output:-



The screenshot shows a database interface with a 'Result Grid' tab. The grid displays the results of a query on the 'Reserve' table. The columns are 'reserve_id', 'reader_id', 'isbn', and 'reserve_date'. The first row contains the values (2, 1, ISBN12346, 2025-08-05). The second row contains NULL values. The interface includes a 'Filter Rows' field and an 'Edit' button.

	reserve_id	reader_id	isbn	reserve_date
▶	2	1	ISBN12346	2025-08-05
✱	NULL	NULL	NULL	NULL

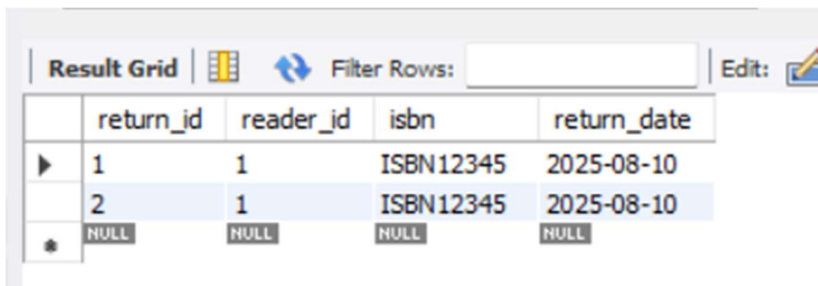
-- Insert sample ReturnBook

```
INSERT INTO ReturnBook (reader_id, isbn, return_date) VALUES  
(1, 'ISBN12345', '2025-08-10');
```

-- this query show return book recored

```
select * from ReturnBook;
```

output:-



The screenshot shows a database interface with a 'Result Grid' tab. The grid displays the results of a query on the 'ReturnBook' table. The columns are 'return_id', 'reader_id', 'isbn', and 'return_date'. The first row contains the values (1, 1, ISBN12345, 2025-08-10). The second row contains the values (2, 1, ISBN12345, 2025-08-10). The third row contains NULL values. The interface includes a 'Filter Rows' field and an 'Edit' button.

	return_id	reader_id	isbn	return_date
▶	1	1	ISBN12345	2025-08-10
	2	1	ISBN12345	2025-08-10
✱	NULL	NULL	NULL	NULL

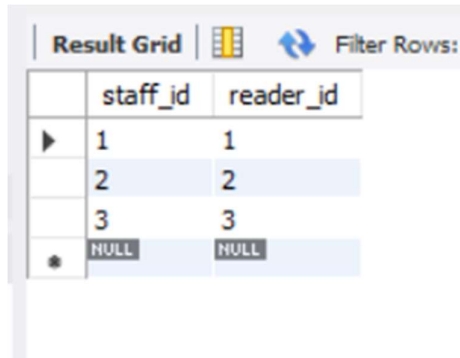
-- Insert mapping in KeepsTrack

```
INSERT INTO KeepsTrack (staff_id, reader_id) VALUES  
(1, 1),  
(2, 2),
```

(3,3);

select * from KeepsTrack;

output:-



The screenshot shows a 'Result Grid' window with a 'Filter Rows' button. The grid contains four rows of data with two columns: 'staff_id' and 'reader_id'. The first three rows have values 1, 2, and 3 respectively. The fourth row has NULL values for both columns. A small asterisk icon is visible in the first column of the fourth row.

	staff_id	reader_id
▶	1	1
	2	2
	3	3
*	NULL	NULL

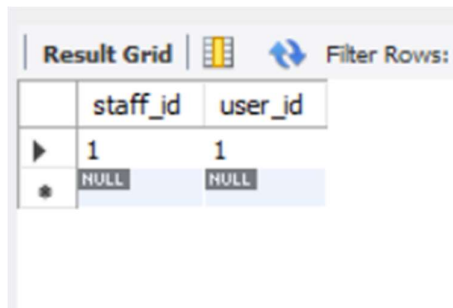
-- Insert into Login tables

INSERT INTO StaffLogin (staff_id, user_id) VALUES (1, 1);

-- this show staffing table and thier values

select * from StaffLogin ;

output:-



The screenshot shows a 'Result Grid' window with a 'Filter Rows' button. The grid contains two rows of data with two columns: 'staff_id' and 'user_id'. The first row has values 1 and 1. The second row has NULL values for both columns. A small asterisk icon is visible in the first column of the second row.

	staff_id	user_id
▶	1	1
*	NULL	NULL

INSERT INTO ReaderLogin (reader_id, user_id) VALUES (1, 2);

-- this show readerlogin table and thier vailues

select * from ReaderLogin ;

output:-

Documentation queries with outputs



	reader_id	user_id
▶	1	2
*	NULL	NULL

-- UPDATE: Fix phone number for reader_id = 2

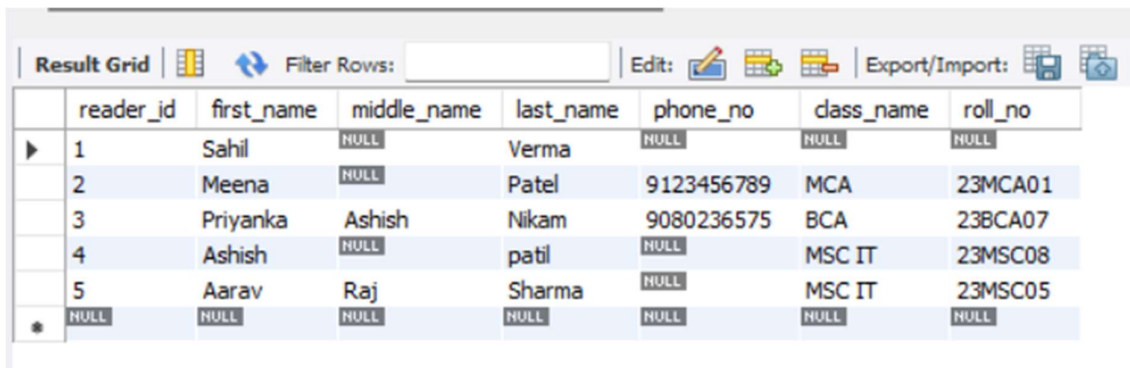
UPDATE Readers

SET phone_no = '9123456789'

WHERE reader_id = 2;

-- select * from Readers;

Output:-



	reader_id	first_name	middle_name	last_name	phone_no	class_name	roll_no
▶	1	Sahil	NULL	Verma	NULL	NULL	NULL
	2	Meena	NULL	Patel	9123456789	MCA	23MCA01
	3	Priyanka	Ashish	Nikam	9080236575	BCA	23BCA07
	4	Ashish	NULL	patil	NULL	MSC IT	23MSC08
	5	Aarav	Raj	Sharma	NULL	MSC IT	23MSC05
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL

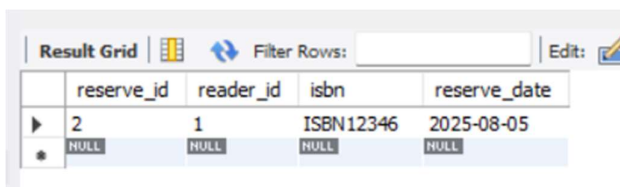
-- DELETE: Remove a reserved record

DELETE FROM Reserve

WHERE reader_id = 1 AND isbn = 'ISBN12346';

select * from Reserve;

output:-



	reserve_id	reader_id	isbn	reserve_date
▶	2	1	ISBN12346	2025-08-05
*	NULL	NULL	NULL	NULL

Documentation queries with outputs

-- Example of IS NULL

```
SELECT * FROM Books WHERE publisher IS NULL;
```

Output:-

[illegible]

-- Example of partial insert (allowed with column list)

```
INSERT INTO Staff (name) VALUES ('Komal Joshi');
```

```
select * from Staff;
```

output:-

Result Grid			Filter Rows: <input type="text"/>
	staff_id	name	
▶	1	Anita Deshmukh	
	2	sahil patil	
	3	Ashwini Borole	
	12	Komal Joshi	
✱	NULL	NULL	

```
-- Example of default/NULL (will show NULL in result if not defined)
```

```
INSERT INTO Readers (first_name, middle_name, last_name) VALUES ('Sahil', NULL, 'Verma');
```

```
-- select * from Readers;
```

Output:-

[illegible]