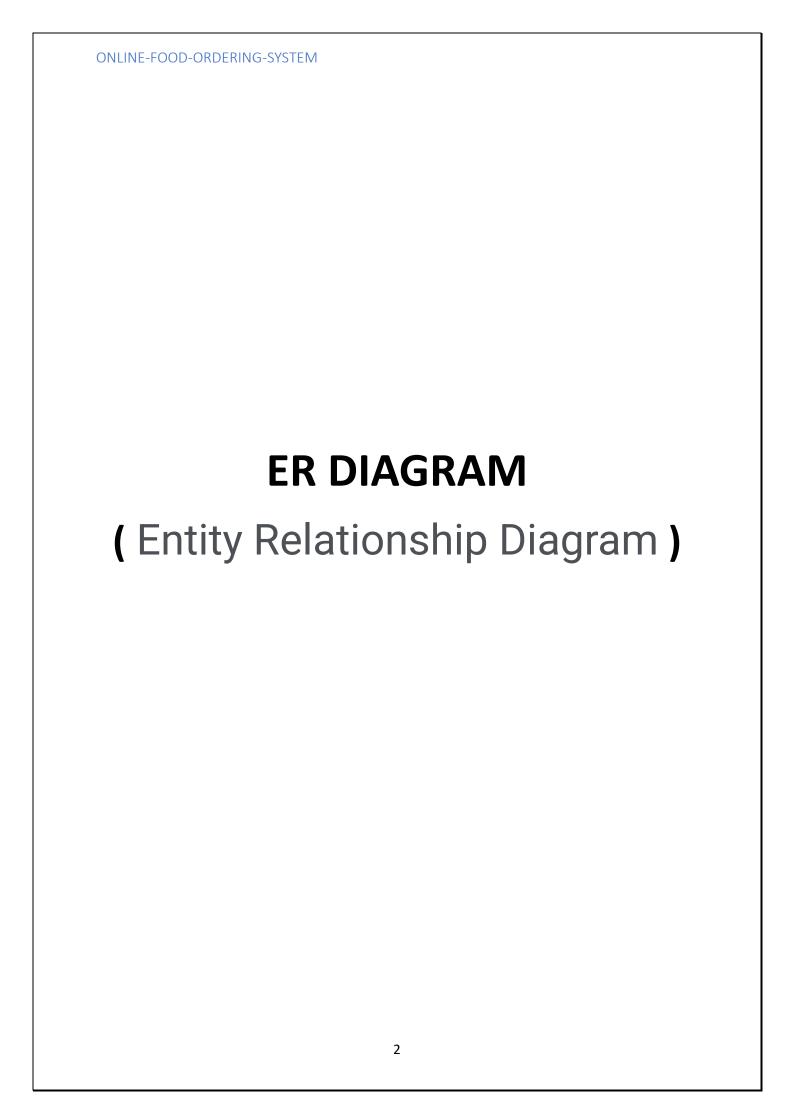
ONLI	NE-FOOD-ORDERING-SYSTEM		
TA	BLES:		
	ORDER		
	ORDER DETAILS		
	CUSTOMER		
	PAYMENT		
	USER		
	RATING		
	MENU		



# **CREATION OF DATABASE**

#### /\*Table1\*/

CREATE TABLE ORDER\_DETAILS (
ID VARCHAR(50),
order\_id VARCHAR(50),
menu\_id VARCHAR(50) UNIQUE,
amount INT,
no\_of\_serving INT,
PRIMARY KEY(ID));

#### /\*TABLE2\*/

CREATE TABLE USER (
ID VARCHAR(50),
FULLNAME VARCHAR(50),
EMAIL\_ADDRESS VARCHAR(50) UNIQUE,
CONTACT VARCHAR(13) CHECK (CONTACT >=0),
USERNAME VARCHAR(20),
PASSWORD VARCHAR(8),
PRIMARY KEY(ID));

# /\*PRIMARY KEY CONSTRAINT\*/

### /\*TABLE3\*/

CREATE TABLE PAYMENT (
ID VARCHAR(50),
order\_id VARCHAR(50) UNIQUE,
amount INT,
paid\_by CHAR(50),
date\_ DATE NOT NULL,
PRIMARY KEY(ID));

## /\*CHECK CONSTRAINT\*/

#### /\*TABLE4\*/

CREATE TABLE CUSTOMER (
ID VARCHAR(50),
NAME CHAR(50),
EMAIL VARCHAR(50) UNIQUE,
ACCOUNT\_STATUS INT,
USERNAME VARCHAR(20),
PASSWORD VARCHAR(10),
PHONE\_NO VARCHAR(13) CHECK (PHONE\_NO >=0),
PRIMARY KEY(ID));

## /\*UNIQUE CONSTARINT\*/

### /\*TABLE5\*/

CREATE TABLE RATING(
ID VARCHAR(50),
score DECIMAL(10,2),
menu\_id VARCHAR(50) UNIQUE,
customer\_id VARCHAR(50) UNIQUE,

date\_recorded DATE,
remarks VARCHAR(50),
PRIMARY KEY(ID));

# /\*FOREIGN KEY CONSTRAINT\*/

### /\*TABLE6\*/

CREATE TABLE MENU (
ID VARCHAR(50),
price INT,
type\_id VARCHAR(50) PRIMARY KEY,
name\_ VARCHAR(50),
status\_ INT,
FOREIGN KEY (ID) REFERENCES USER(ID)
):

# /\*NOT NULL CONSTRAINT\*/

## /\*TABLE7\*/

CREATE TABLE ORDER\_(
ID VARCHAR(50),
customer\_id VARCHAR(50),
total\_amount INT,
order\_status VARCHAR(50),
processed\_by VARCHAR(50),
order\_date DATE NOT NULL,
PRIMARY KEY(ID));

# > DDL

## (COMMANDS: CREATE ALTER DROP VIEW RENAME)

## Alter

## Adding a new column

ALTER TABLE USER

ADD DOB DATE;

SELECT \* FROM USER;

ID	FULLNAME	EMAIL_ADDRESS	CONTACT	USERNAME	PASSWORD	DOB
3	SNEHAL	SP23@GMAIL.COM	9891100001	S23	SNE	
4	SAKSHI	SJ3@GMAIL.COM	9888100001	S24	SAK	
1	JIA	FIA002@GMAIL.COM	9771100001	S26	12J	
2	MAHIKA	K2@GMAIL.COM	8891400001	G23	6GS	
5	SHIVANI	M2F3@GMAIL.COM	7791900001	Y23	YEN	

# • DROP

## **Dropping a column**

ALTER TABLE USER DROP DOB;

SELECT \* FROM USER;

3         SNEHAL         SP23@GMAIL.COM         9891100001         S23         SNE           4         SAKSHI         SJ3@GMAIL.COM         9888100001         S24         SAK           1         JIA         FIA002@GMAIL.COM         9771100001         S26         12J           2         MAHIKA         K2@GMAIL.COM         8891400001         G23         6GS           5         SHIVANI         M2F3@GMAIL.COM         7791900001         Y23         YEN	ID	FULLNAME	EMAIL_ADDRESS	CONTACT	USERNAME	PASSWORD
1 JIA FIA002@GMAIL.COM 9771100001 S26 12J 2 MAHIKA K2@GMAIL.COM 8891400001 G23 6GS	3	SNEHAL	SP23@GMAIL.COM	9891100001	S23	SNE
2 MAHIKA K2@GMAIL.COM 8891400001 G23 6GS	4	SAKSHI	SJ3@GMAIL.COM	9888100001	S24	SAK
	1	JIA	FIA002@GMAIL.COM	9771100001	S26	12J
5 SHIVANI M2F3@GMAIL.COM 7791900001 Y23 YEN	2	MAHIKA	K2@GMAIL.COM	8891400001	G23	6GS
	5	SHIVANI	M2F3@GMAIL.COM	7791900001	Y23	YEN

## Adding a new constraint

ALTER TABLE USER

ADD CONSTRAINT P\_USER PRIMARY KEY (ID);

## SELECT \* FROM USER;

	ID	FULLNAME	EMAIL_ADDRESS	CONTACT	USERNAME	PASSWORD
•	1	JIA	FIA002@GMAIL.COM	9771100001	S26	123
	2	MAHIKA	K2@GMAIL.COM	8891400001	G23	6GS
	3	SNEHAL	SP23@GMAIL.COM	9891100001	S23	SNE
	4	SAKSHI	SJ3@GMAIL.COM	9888100001	524	SAK
	5	SHIVANI	M2F3@GMAIL.COM	7791900001	Y23	YEN
	NULL	HULL	NULL	NULL	HULL	NULL

## **Dropping constraint**

ALTER TABLE USER
DROP CONSTRAINT P\_USER;
SELECT \* FROM USER;

ID	FULLNAME	EMAIL_ADDRESS	CONTACT	USERNAME	PASSWORD
3	SNEHAL	SP23@GMAIL.COM	9891100001	S23	SNE
4	SAKSHI	SJ3@GMAIL.COM	9888100001	S24	SAK
1	JIA	FIA002@GMAIL.COM	9771100001	S26	12J
2	MAHIKA	K2@GMAIL.COM	8891400001	G23	6GS
5	SHIVANI	M2F3@GMAIL.COM	7791900001	Y23	YEN

# **Modify column**

ALTER TABLE USER
ALTER COLUMN FULLNAME CHAR(50);
SELECT \* FROM USER;

ID	FULLNAME	EMAIL_ADDRESS	CONTACT	USERNAME	PASSWORD
3	SNEHAL	SP23@GMAIL.COM	9891100001	S23	SNE
4	SAKSHI	SJ3@GMAIL.COM	9888100001	S24	SAK
1	JIA	FIA002@GMAIL.COM	9771100001	S26	12J
2	MAHIKA	K2@GMAIL.COM	8891400001	G23	6GS
5	SHIVANI	M2F3@GMAIL.COM	7791900001	Y23	YEN

#### VIEW

CREATE VIEW USER\_VIEW AS
SELECT ID, FULLNAME, USERNAME, CONTACT
FROM USER
WHERE ID>1;

SELECT \* FROM USER\_VIEW;

ID	FULLNAME	USERNAME	CONTACT
2	MAHIKA	G23	8891400001
3	SNEHAL	S23	9891100001
4	SAKSHI	S24	9888100001
5	SHIVANI	Y23	7791900001
6	ABHI	AG2	9121100001
7	NIK	NNI	8127002201

### • RENAME

INSERT INTO RATING (MENU\_ID,ID,SCORE,REMARKS,DATE\_RECORDED,CUSTOMER\_ID) VALUES ("E12","2",4,"NICE","2013-03-12","122"),("F31","5",3.5,"GOOD","2022-09-11","34U"); SELECT \* FROM RATING;

ALTER TABLE RATING RENAME TO RATING\_TABLE\_; SELECT \* FROM RATING\_TABLE\_ WHERE MENU\_ID>5;

ID	score	menu_id	customer_id	date_recorded	remarks
2	4	12	122	2013-03-12	NICE
5	3.5	31	34	2022-09-11	GOOD

### > DML

(COMMANDS: SELECT MERGE INSERT DELETE UPDATE)

#### SELECT

SELECT ID, AMOUNT, ORDER\_ID FROM PAYMENT;

ID	amount	order_id
1	2300	43J2
2	1050	58S2
5	8402	62H9
3	590	JH73
4	2300	GHWO

### MERGE

MERGE INTO USER AS U
USING CUSTOMER AS CUST
ON U.ID = CUST.ID
WHEN MATCHED THEN
UPDATE SET U.CONTACT = CUST.CONTACT, U.USERNAME = U.USERNAME
WHEN NOT MATCHED THEN
INSERT (ID, CONTACT, USERNAME)
VALUES (CUST.ID, CUST.CONTACT, CUST.USERNAME)
WHEN NOT MATCHED BY CUST THEN
DELETE;

#### Insert

INSERT INTO ORDER\_DETAILS (ID,order\_id,menu\_id,amount,no\_of\_serving) VALUES ("1","32S2","1190",1240,5),("2","33S2","1195",240,2),("5","34S2","12OO",1110,3),("4","35S2","1F9 O",140,1),("3","36S2","109O",5240,7);

SELECT \* FROM ORDER\_DETAILS;

ID	order_id	menu_id	amount	no_of_serving
1	32\$2	1190	1240	5
2	33S2	1195	240	2
5	34\$2	1200	1110	3
4	35\$2	1F9O	140	1
3	36\$2	1090	5240	7

INSERT INTO USER (ID,FULLNAME,EMAIL\_ADDRESS,CONTACT,USERNAME,PASSWORD) VALUES (3,"SNEHAL","SP23@GMAIL.COM",9891100001,"S23","SNE"),(4,"SAKSHI","SJ3@GMAIL.COM",98881 00001,"S24","SAK"),(1,"JIA","FIA002@GMAIL.COM",9771100001,"S26","12J"),(2,"MAHIKA","K2@G MAIL.COM",8891400001,"G23","6GS"),(5,"SHIVANI","M2F3@GMAIL.COM",7791900001,"Y23","YEN" );

### SELECT \* FROM USER;

ID	FULLNAME	EMAIL_ADDRESS	CONTACT	USERNAME	PASSWORD
3	SNEHAL	SP23@GMAIL.COM	9891100001	S23	SNE
4	SAKSHI	SJ3@GMAIL.COM	9888100001	S24	SAK
1	JIA	FIA002@GMAIL.COM	9771100001	S26	12J
2	MAHIKA	K2@GMAIL.COM	8891400001	G23	6GS
5	SHIVANI	M2F3@GMAIL.COM	7791900001	Y23	YEN

INSERT INTO PAYMENT (ID,order\_id,amount,paid\_by,date\_) VALUES (1,"43J2",2300,"DEBIT CARD","2023-09-21"),(2,"58S2",1050,"UPI","2023-05-01"),(5,"62H9",8402,"DEBIT CARD","2022-10-11"),(3,"JH73",590,"CASH","2023-12-02"),(4,"GHWO",2300,"CREDIT CARD","2021-02-28"); SELECT \* FROM PAYMENT;

ID	order_id	amount	paid_by	date_
1	43J2	2300	DEBIT CARD	2023-09-21
2	58S2	1050	UPI	2023-05-01
5	62H9	8402	DEBIT CARD	2022-10-11
3	JH73	590	CASH	2023-12-02
4	GHWO	2300	CREDIT CARD	2021-02-28

INSERT INTO CUSTOMER (ID,NAME,EMAIL,PHONE\_NO,USERNAME, PASSWORD,ACCOUNT\_STATUS) VALUES

(2,"MAHIKA","K2@GMAIL.COM",8891400001,"G23","6GS",52000),(3,"SNEHAL","SP23@GMAIL.COM ",9891100001,"S23","SNE",26500),(4,"SAKSHI","SJ3@GMAIL.COM",9888100001,"S24","SAK",27699), (5,"SHIVANI","M2F3@GMAIL.COM",7791900001,"Y23","YEN",15446),(1,"JIA","FIA002@GMAIL.COM ",9771100001,"S26","12J",23134);

### SELECT \* FROM CUSTOMER;

ID	NAME	EMAIL	ACCOUNT_STATUS	USERNAME	PASSWORD	PHONE_NO
2	MAHIKA	K2@GMAIL.COM	52000	G23	6GS	8891400001
3	SNEHAL	SP23@GMAIL.COM	26500	S23	SNE	9891100001
4	SAKSHI	SJ3@GMAIL.COM	27699	\$24	SAK	9888100001
5	SHIVANI	M2F3@GMAIL.COM	15446	Y23	YEN	7791900001
1	JIA	FIA002@GMAIL.COM	23134	\$26	12J	9771100001

# Update

Update (using with)
UPDATE ORDER\_DETAILS
SET amount = amount \* 1.10
WHERE ID = "3";

SELECT \* FROM ORDER\_DETAILS;

ID	order_id	menu_id	amount	no_of_serving
1	32S2	1190	1240	5
2	33S2	1195	240	2
5	34S2	1200	1110	3
4	35S2	1F9O	140	1
3	36S2	1090	5764.000000000001	7

## **Update(without where)**

UPDATE ORDER\_DETAILS
SET amount = amount \* 1.10;

# SELECT \* FROM ORDER\_DETAILS;

ID	order_id	menu_id	amount	no_of_serving
1	32S2	1190	1364	5
2	33S2	1195	264	2
5	34S2	1200	1221	3
4	35\$2	1F9O	154	1
3	36S2	1090	6340.4000000000015	7

# • Delete

# Delete (with where)

DELETE FROM ORDER\_DETAILS WHERE amount < 1000;

SELECT \* FROM ORDER\_DETAILS;

ID	order_id	menu_id	amount	no_of_serving
1	32S2	1190	1364	5
5	34\$2	1200	1221	3
3	36S2	1090	6340.4000000000015	7

## **Delete(without where)**

DELETE FROM ORDER\_DETAILS;

SELECT \* FROM ORDER\_DETAILS;

SQL query successfully executed. However, the result set is empty.

# Select (using where)

Select amount,Order\_id FROM PAYMENT WHERE AMOUNT>1000;

amount	order_id
2300	43J2
1050	58S2
8402	62H9
2300	GHWO

# Select (without where)

Select amount,Order\_id FROM PAYMENT

amount	order_id
2300	43J2
1050	58S2
8402	62H9
590	JH73
2300	GHWO

# > Boolean operators

### • AND

SELECT \* FROM USER

WHERE ID = 3 AND PASSWORD = "SNE";

ID	FULLNAME	EMAIL_ADDRESS	CONTACT	USERNAME	PASSWORD
3	SNEHAL	SP23@GMAIL.COM	9891100001	S23	SNE

### OR

# SELECT \* FROM USER

WHERE ID = 3 OR PASSWORD = "SAK";

ID	FULLNAME	EMAIL_ADDRESS	CONTACT	USERNAME	PASSWORD
3	SNEHAL	SP23@GMAIL.COM	9891100001	S23	SNE
4	SAKSHI	SJ3@GMAIL.COM	9888100001	S24	SAK

## (WITHOUT)

# SELECT \* FROM USER;

ID	FULLNAME	EMAIL_ADDRESS	CONTACT	USERNAME	PASSWORD
3	SNEHAL	SP23@GMAIL.COM	9891100001	S23	SNE
4	SAKSHI	SJ3@GMAIL.COM	9888100001	S24	SAK
1	JIA	FIA002@GMAIL.COM	9771100001	S26	12J
2	MAHIKA	K2@GMAIL.COM	8891400001	G23	6GS
5	SHIVANI	M2F3@GMAIL.COM	7791900001	Y23	YEN

### NOT

## SELECT \* FROM USER

## WHERE NOT ID = 3;

ID	FULLNAME	EMAIL_ADDRESS	CONTACT	USERNAME	PASSWORD
4	SAKSHI	SJ3@GMAIL.COM	9888100001	S24	SAK
1	JIA	FIA002@GMAIL.COM	9771100001	S26	12J
2	MAHIKA	K2@GMAIL.COM	8891400001	G23	6GS
5	SHIVANI	M2F3@GMAIL.COM	7791900001	Y23	YEN

# > Logical operators

#### • BETWEEN

SELECT \* FROM USER

WHERE ID BETWEEN 2 AND 4;

ID	FULLNAME	EMAIL_ADDRESS	CONTACT	USERNAME	PASSWORD
2	MAHIKA	K2@GMAIL.COM	8891400001	G23	6GS
3	SNEHAL	SP23@GMAIL.COM	9891100001	S23	SNE
4	SAKSHI	SJ3@GMAIL.COM	9888100001	S24	SAK

### • IN

SELECT \* FROM USER

WHERE ID IN (2,1,3);

ID	FULLNAME	EMAIL_ADDRESS	CONTACT	USERNAME	PASSWORD
1	JIA	FIA002@GMAIL.COM	9771100001	S26	12J
2	MAHIKA	K2@GMAIL.COM	8891400001	G23	6GS
3	SNEHAL	SP23@GMAIL.COM	9891100001	S23	SNE

### • LIKE

SELECT \* FROM USER

WHERE FULLNAME LIKE "S%";

ID	FULLNAME	EMAIL_ADDRESS	CONTACT	USERNAME	PASSWORD
3	SNEHAL	SP23@GMAIL.COM	9891100001	S23	SNE
4	SAKSHI	SJ3@GMAIL.COM	9888100001	S24	SAK
5	SHIVANI	M2F3@GMAIL.COM	7791900001	Y23	YEN

### • Exists

**SELECT FULLNAME** 

FROM USER

WHERE EXISTS (

SELECT EMAIL\_ADDRESS

FROM CUSTOMER

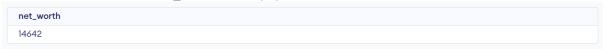
WHERE USER.id = CUSTOMER.d);

	ID	FULLNAME	EMAIL_ADDRESS	CONTACT	USERNAME	PASSWORD
١	1	JIA	FIA002@GMAIL.COM	9771100001	S26	123
	2	MAHIKA	K2@GMAIL.COM	8891400001	G23	6GS
	3	SNEHAL	SP23@GMAIL.COM	9891100001	S23	SNE
	4	SAKSHI	SJ3@GMAIL.COM	9888100001	524	SAK
	5	SHIVANI	M2F3@GMAIL.COM	7791900001	Y23	YEN

# > Inbuilt functions

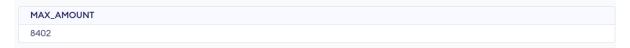
• Sum

SELECT SUM(amount) AS net\_worth FROM payment;



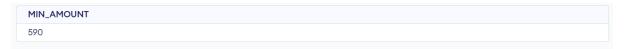
#### • MAX

SELECT MAX(amount) AS MAX\_AMOUNT FROM payment;



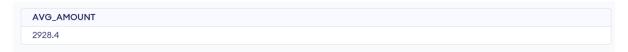
### • MIN

SELECT MIN(amount) AS MIN\_AMOUNT FROM payment;



#### AVG

SELECT AVG(amount) AS AVG\_AMOUNT FROM payment;



#### • DATE

SELECT DATEDIFF("2021-02-28","2023-05-01") AS DATE\_DIFFERENCE;

	DATE_DIFFERENCE
•	-792

## • TRIM

SELECT TRIM(' DEBIT , CARD ') AS trimmed\_string;

trimmed_string			
DEBIT, CARD			

# • Having and group by clause

SELECT ID, SUM(amount) AS total\_order\_value

FROM payment

**GROUP BY ID** 

HAVING SUM(amount) > 1000;

ID	total_order_value
1	2300
2	1050
4	2300
5	8402

## > JOINS

#### • INNER JOIN

SELECT USER.FULLNAME, USER.USERNAME, PAYMENT.AMOUNT

FROM USER

INNER JOIN PAYMENT ON USER.ID = PAYMENT.ID;

FULLNAME	USERNAME	amount
SNEHAL	\$23	590
SAKSHI	\$24	2300
JIA	\$26	2300
MAHIKA	G23	1050
SHIVANI	Y23	8402

#### • EQUI JOIN (=)

SELECT USER.FULLNAME, USER.USERNAME, PAYMENT.AMOUNT

FROM USER

INNER JOIN PAYMENT ON USER.ID = PAYMENT.ID;

FULLNAME	USERNAME	amount
SNEHAL	\$23	590
SAKSHI	\$24	2300
JIA	\$26	2300
MAHIKA	G23	1050
SHIVANI	Y23	8402

#### • NATURAL JOIN

SELECT USER.FULLNAME, USER.USERNAME, PAYMENT.AMOUNT

FROM USER

NATURAL JOIN PAYMENT;

FULLNAME	USERNAME	amount
SNEHAL	S23	590
SAKSHI	S24	2300
JIA	\$26	2300
MAHIKA	G23	1050
SHIVANI	Y23	8402

#### LEFT OUTER JOIN

INSERT INTO USER (ID,FULLNAME,EMAIL\_ADDRESS,CONTACT,USERNAME,PASSWORD) VALUES (7,"ABHI","AB7@GMAIL.COM",9121100001,"AG2","87G");

INSERT INTO USER (ID, FULLNAME, EMAIL\_ADDRESS, CONTACT, USERNAME, PASSWORD) VALUES (19, "NIK", "NB7@EMAIL.COM", 8127002201, "NNI", "G9JK");

SELECT USER.FULLNAME, USER.USERNAME, PAYMENT.AMOUNT

FROM USER

LEFT OUTER JOIN PAYMENT ON USER.ID = PAYMENT.ID;

FULLNAME	USERNAME	amount
SNEHAL	\$23	590
SAKSHI	\$24	2300
JIA	\$26	2300
MAHIKA	G23	1050
SHIVANI	Y23	8402
ABHI	AG2	
NIK	NNI	

#### RIGHT OUTER JOIN

INSERT INTO PAYMENT (ID,order\_id,amount,paid\_by,date\_) VALUES (8,"49R2",1300,"CREDIT CARD","2022-09-21");

INSERT INTO PAYMENT (ID,order\_id,amount,paid\_by,date\_) VALUES (9,"11Y2",3300,"DEBIT CARD","2022-04-01");

SELECT USER.FULLNAME, USER.USERNAME, PAYMENT.AMOUNT

FROM USER

RIGHT OUTER JOIN PAYMENT ON USER.ID = PAYMENT.ID;

	FULLNAME	USERNAME	AMOUNT
•	JIA	S26	2300
	MAHIKA	G23	1050
	SNEHAL	S23	590
	SAKSHI	S24	2300
	SHIVANI	Y23	8402
	NULL	NULL	1300
	NULL	NULL	3300

#### • FULL OUTER JOIN

SELECT USER.FULLNAME, USER.USERNAME, PAYMENT.AMOUNT

FROM USER

FULL OUTER JOIN PAYMENT ON USER.ID = PAYMENT.ID;

	ID	order_id	amount	paid_by	date_
•	1	4332	2300	DEBIT CARD	2023-09-21
	2	58S2	1050	UPI	2023-05-01
	3	JH73	590	CASH	2023-12-02
	4	GHWO	2300	CREDIT CARD	2021-02-28
	5	62H9	8402	DEBIT CARD	2022-10-11
	8	49R2	1300	CREDIT CARD	2022-09-21
	9	11Y2	3300	DEBIT CARD	2022-04-01
	NULL	NULL	NULL	NULL	NULL