COURT CASES DATABASE

ER DIAGRAM:-

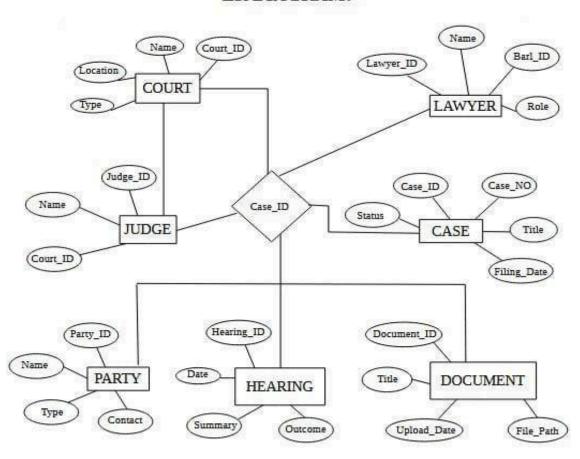


TABLE NAME: CASE

COLUMN NAME	DATA TYPE	INDEX	DESCRIPTION
CASE_ID	INT	PRIMARY KEY	Unique identifier for case
TITLE	VARCHAR		Case Title
CASE_TYPE	VARCHAR		Type of the case(Civil, Criminal, Family, etc.)
FILING_DATE	DATE		Date when the case was filed
COURT_ID	INT	FOREIGN KEY	References Court(Court_ID)
JUDGE_ID	INT	FOREIGN KEY	References Judge(Judge_ID)

TABLE NAME:COURT

COLUMN NAME	DATA TYPE	INDEX	DESCRIPTION
COURT_ID	INT	PRIMARY KEY	Unique identifier for each court
COURT_NAME	VARCHAR		Name of the court
LOCATION	VARCHAR		Location of the court
TYPE	VARCHAR		Type of the court
CASE_ID	INT	FOREIGN KEY	References Case(Case_ID)

TABLE NAME: JUDGE

COLUMN NAME	DATA TYPE	INDEX	DESCRIPTION
JUDGE_ID	INT	PRIMARY KEY	Unique identifier for each judge
JUDGE_NAME	VARCHAR		Name of the court
DESIGNATION	VARCHAR		Designation of judge
COURT_ID	INT	FOREIGN KEY	References Judge(Judge_id)
CASE_ID	INT	FOREIGN KEY	References Case(Case_id)

TABLE NAME: LAWYER

COLUMN NAME	DATA TYPE	INDEX	DESCRIPTION
LAWYER_ID	INT	PRIMARY KEY	Unique identifier for each lawyer
LAWYER_NAME	VARCHAR		Name of the lawyer
SPECIALIZATION	VARCHAR		Area of specialization (Criminal, Civil, etc.)
CONTACT_INFO	VARCHAR		Email/phone contact
CASE_ID	INT	FOREIGN KEY	References Case(Case_ID)

TABLE NAME:PARTY

COLUMN NAME	DATA TYPE	INDEX	DESCRIPTION
PARTY_ID	INT	PRIMARY KEY	Unique identifier for each party
PARTY_NAME	VARCHAR		Name of the party
ROLE	VARCHAR		Role of the party in the case
LAWYER_ID	INT	FOREIGN KEY	References Lawyer(Lawyer_ID)
CASE_ID	INT	FOREIGN KEY	References Case(Case_ID)

TABLE NAME: HEARING;

COLUMN NAME	DATA TYPE	INDEX	DESCRIPTION
HEARING_ID	INT	PRIMARY KEY	Unique identifier for each hearing
HEARING_DATE	DATE		Date of hearing
DESCRIPTION	VARCHER		Detailed description of proceedings during the hearing
OUTCOME	VARCHER		Result/decision of the hearing (e.g., Adjourned, Evidence Accepted, Judgment Reserved)
CASE_ID	INT	FOREIGN KEY	References Case(Case_ID)

TABLE NAME: DOCUMENT

COLUMN NAME	DATA TYPE	INDEX	DESCRIPTION
DOCUMENT_ID	INT	PRIMARY KEY	Unique identifier for each document
DOCUMENT_NAME	VARCHAR		Name of the document
DOCUMENT_TYPE	VARCHAR		Type of document (FIR, Petition, Evidence, etc.)
SUBMISSION_DATE	DATE		Date document was submitted
CASE_ID	INT	FOREIGN KEY	References Case(Case_ID)

Table Creation and Insertion:-

CREATE TABLE Case (Case_ID INT PRIMARY KEY, Title VARCHAR(200), Case_Type VARCHAR(50), Filing_Date DATE, Court_ID INT, Judge_ID INT);

Table created.

INSERT INTO Case VALUES (301, 'Rajiv vs State of Tamil Nadu', 'Criminal', '10-jan-2020', 201, 401);

1 row created.

INSERT INTO Case VALUES(302, 'Priya vs ABC Corporation', 'Civil', '21-FEB-2021', 202, 402);

1 row created.

INSERT INTO Case VALUES(303, 'State of Maharashtra vs Suresh', 'Criminal', '18-MAR-2021', 203, 403);

1 row created.

INSERT INTO Case VALUES(304, 'Sunil vs Anjali', 'Family', '05-APR-2022', 204, 404);

1 row created.

INSERT INTO Case VALUES(305, 'Bharat Traders vs Esha Ltd', 'Commercial', '20-MAY-2022', 205, 405);

1 row created.

INSERT INTO Case VALUES(306, 'Meena vs Sun Pharma', 'Labor', '11-JUN-2023', 206, 406);

1 row created.

INSERT INTO Case VALUES(307, 'Ali vs Fatima', 'Divorce', '01-JUL-2023', 207, 407);

1 row created.

INSERT INTO Case VALUES(308, 'XYZ Ltd vs Tax Dept.', 'Tax', '15-AUG-2024', 208, 408);

1 row created.

INSERT INTO Case VALUES(309, 'State of Odisha vs Ramesh', 'Criminal', '07-SEP-2024', 209, 409);

1 row created.

INSERT INTO Case VALUES(310, 'Kumar vs Kanchalna', 'Family', '22-OCT-2025', 210, 410);

1 row created.

CREATE TABLE Court (Court_ID INT PRIMARY KEY, Court_Name VARCHAR(100), Location VARCHAR(100), Type VARCHAR(50), Case_ID INT);

Table created.

INSERT INTO Court VALUES (201, 'Madras High Court', 'Chennai', 'High Court', 301);

1 row created.

INSERT INTO Court VALUES (202, 'Chennai Civil Court', 'Chennai', 'Civil Court', 302);

1 row created.

INSERT INTO Court VALUES (203, 'Mumbai Sessions Court', 'Mumbai', 'Sessions Court', 303);

1 row created.

INSERT INTO Court VALUES (204, 'Delhi Family Court', 'Delhi', 'Family Court', 304);

1 row created.

INSERT INTO Court VALUES (205, 'Ahmedabad Commercial Court', 'Ahmedabad', 'Commercial Court', 305);

1 row created.

INSERT INTO Court VALUES (206, 'Pune Labor Court', 'Pune', 'Labor Court', 306);

1 row created.

INSERT INTO Court VALUES (207, 'Hyderabad Family Court', 'Hyderabad', 'Family Court', 307);

1 row created.

INSERT INTO Court VALUES (208, 'Kolkata Tax Court', 'Kolkata', 'Tax Court', 308);

INSERT INTO Court VALUES (209, 'Bhubaneswar Criminal Court', 'Bhubaneswar', 'Criminal Court', 309);

1 row created.

INSERT INTO Court VALUES (210, 'Coimbatore Family Court', 'Coimbatore', 'Family Court', 310);

1 row created.

CREATE TABLE Judge (Judge_ID INT PRIMARY KEY,Judge_Name VARCHAR(100),Designation VARCHAR(50),Court ID INT,Case ID INT);

Table created.

INSERT INTO Judge VALUES (401, 'Justice R. Subramanian', 'High Court Judge', 201, 301);

1 row created.

INSERT INTO Judge VALUES (402, 'Justice Priya Menon', 'Civil Judge', 202, 302);

1 row created.

INSERT INTO Judge VALUES (403, 'Justice Dinesh Patil', 'Sessions Judge', 203, 303);

1 row created.

INSERT INTO Judge VALUES (404, 'Justice Anita Sharma', 'Family Judge', 204, 304);

1 row created.

INSERT INTO Judge VALUES (405, 'Justice K. Suresh', 'Commercial Judge', 205, 305);

1 row created.

INSERT INTO Judge VALUES (406, 'Justice Ramesh Iyer', 'Labor Judge', 206, 306);

1 row created.

INSERT INTO Judge VALUES (407, 'Justice Leela Devi', 'Family Judge', 207, 307);

1 row created.

INSERT INTO Judge VALUES (408, 'Justice Aslam Khan', 'Tax Judge', 208, 308);

```
INSERT INTO Judge VALUES (409, 'Justice Binod Das', 'Criminal Judge', 209, 309);
1 row created.
INSERT INTO Judge VALUES (410, 'Justice Kanchana Rao', 'Family Judge', 210, 310);
1 row created.
CREATE TABLE Lawyer (Lawyer_ID INT PRIMARY KEY, Lawyer_Name VARCHAR(100),
Specialization VARCHAR(100), Contact Info VARCHAR(100), Case ID INT);
Table created.
INSERT INTO Lawyer VALUES (501, 'Adv. Arjun Mehta', 'Criminal Law',
'arjunmehta@gmail.com', 301);
1 row created.
INSERT INTO Lawyer VALUES (502, 'Adv. Sneha Nair', 'Civil Litigation',
'snehanair@lawfirm.com', 302);
1 row created.
INSERT INTO Lawyer VALUES (503, 'Adv. Ravi Deshmukh', 'Criminal Law',
'ravideshmukh@courtmail.com', 303);
1 row created.
INSERT INTO Lawyer VALUES (504, 'Adv. Neha Kapoor', 'Family Law',
'nehakapoor@lawchambers.com', 304);
1 row created.
INSERT INTO Lawyer VALUES (505, 'Adv. Rohit Jain', 'Commercial Law',
'rohitjain@firm.co.in', 305);
1 row created.
INSERT INTO Lawyer VALUES (506, 'Adv. Deepika Rao', 'Labor Law',
'deepikarao@legal.org', 306);
1 row created.
INSERT INTO Lawyer VALUES (507, 'Adv. Imran Siddiqui', 'Family Law',
'imransiddiqui@law.co', 307);
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INSERT INTO Lawyer VALUES (508, 'Adv. Swati Joshi', 'Tax Law', 'swatijoshi@taxfirm.com',
308);
1 row created.
INSERT INTO Lawyer VALUES (509, 'Adv. Raghav Patnaik', 'Criminal Law',
'raghavp@justice.org', 309);
1 row created.
INSERT INTO Lawyer VALUES (510, 'Adv. Kiran Bedi', 'Family Law',
'kiranbedi@familylaw.in', 310);
1 row created.
CREATE TABLE Party ( Party_ID INT PRIMARY KEY, Party_Name VARCHAR(100), Role
VARCHAR(50), Lawyer_ID INT, Case_ID INT);
Table create
INSERT INTO Party VALUES (601, 'Rajiv', 'Plaintiff', 501, 301);
1 row created.
INSERT INTO Party VALUES (602, 'State of Tamil Nadu', 'Defendant', 501, 301);
1 row created.
INSERT INTO Party VALUES (603, 'Priya', 'Plaintiff', 502, 302);
1 row created.
INSERT INTO Party VALUES (604, 'ABC Corporation', 'Defendant', 502, 302);
1 row created.
INSERT INTO Party VALUES (605, 'Sunil', 'Petitioner', 504, 304);
1 row created.
INSERT INTO Party VALUES (606, 'Anjali', 'Respondent', 504, 304);
1 row created.
INSERT INTO Party VALUES (607, 'Ali', 'Petitioner', 507, 307);
1 row created.
```

INSERT INTO Party VALUES (608, 'Fatima', 'Respondent', 507, 307);

1 row created.

INSERT INTO Party VALUES (609, 'Kumar', 'Petitioner', 510, 310);

1 row created.

INSERT INTO Party VALUES (610, 'Kanchana', 'Respondent', 510, 310);

1 row created.

CREATE TABLE Hearing (Hearing_ID INT PRIMARY KEY, Hearing_Date DATE, Description VARCHAR2(200), Outcome VARCHAR(200), Case_ID INT);

Table created.

INSERT INTO Hearing VALUES (701, TO_DATE('15-JAN-2020', 'DD-MON-YYYY'), 'First hearing - charges framed', 'Adjourned', 301);

1 row created.

INSERT INTO Hearing VALUES (702, TO_DATE('20-FEB-2021', 'DD-MON-YYYY'), 'Initial arguments presented', 'Pending', 302);

1 row created.

INSERT INTO Hearing VALUES (703, TO_DATE('25-MAR-2021', 'DD-MON-YYYY'), 'Witness statements recorded', 'In Progress', 303);

1 row created.

INSERT INTO Hearing VALUES (704, TO_DATE('10-APR-2022', 'DD-MON-YYYY'), 'Counseling session', 'Reconciliation Failed', 304);

1 row created.

INSERT INTO Hearing VALUES (705, TO_DATE('18-MAY-2022', 'DD-MON-YYYY'), 'Cross-examination', 'Ongoing', 305);

1 row created.

INSERT INTO Hearing VALUES (706, TO_DATE('15-JUN-2023', 'DD-MON-YYYY'), 'Labor dispute negotiation', 'Partial Settlement', 306);

INSERT INTO Hearing VALUES (707, TO_DATE('05-JUL-2023', 'DD-MON-YYYY'), 'Final arguments heard', 'Reserved for Judgment', 307);

1 row created.

INSERT INTO Hearing VALUES (708, TO_DATE('20-AUG-2024', 'DD-MON-YYYY'), 'Tax documents reviewed', 'Further Hearing Scheduled', 308);

1 row created.

INSERT INTO Hearing VALUES (709, TO_DATE('12-SEP-2024', 'DD-MON-YYYY'), 'Evidence submitted by prosecution', 'Adjourned', 309);

1 row created.

INSERT INTO Hearing VALUES (710, TO_DATE('30-OCT-2025', 'DD-MON-YYYY'), 'Final order pronounced', 'Judgment Passed', 310);

1 row created.

CREATE TABLE Document (Document_ID INT PRIMARY KEY, Document_Name VARCHAR(100), Document_Type VARCHAR(50), Submission_Date DATE, Case_ID INT);

Table created.

INSERT INTO Document VALUES (801, 'FIR Report', 'Evidence', TO_DATE('12-JAN-2020', 'DD-MON-YYYY'), 301);

1 row created.

INSERT INTO Document VALUES (802, 'Contract Agreement', 'Legal', TO_DATE('22-FEB-2021', 'DD-MON-YYYY'), 302);

1 row created.

INSERT INTO Document VALUES (803, 'Witness Statement', 'Evidence', TO_DATE('26-MAR-2021', 'DD-MON-YYYY'), 303);

1 row created.

INSERT INTO Document VALUES (804, 'Marriage Certificate', 'Personal', TO_DATE('12-APR-2022', 'DD-MON-YYYY'), 304);

1 row created.

INSERT INTO Document VALUES (805, 'Business License', 'Commercial', TO_DATE('20-MAY-2022', 'DD-MON-YYYY'), 305);

1 row created.

INSERT INTO Document VALUES (806, 'Employment Record', 'Labor', TO_DATE('17-JUN-2023', 'DD-MON-YYYY'), 306);

1 row created.

INSERT INTO Document VALUES (807, 'Divorce Petition', 'Legal', TO_DATE('07-JUL-2023', 'DD-MON-YYYY'), 307);

1 row created.

INSERT INTO Document VALUES (808, 'Audit Report', 'Financial', TO_DATE('23-AUG-2024', 'DD-MON-YYYY'), 308);

1 row created.

INSERT INTO Document VALUES (809, 'Forensic Report', 'Evidence', TO_DATE('14-SEP-2024', 'DD-MON-YYYY'), 309);

1 row created.

INSERT INTO Document VALUES (810, 'Custody Agreement', 'Family', TO_DATE('01-NOV-2025', 'DD-MON-YYYY'), 310);

★ CONSTRAINTS COMMANDS:-

Add FOREIGN KEY:

SQL>ALTER TABLE Case ADD CONSTRAINT fk_case_court FOREIGN KEY (Court_ID) REFERENCES Court(Court_ID);

TABLE ALTERED

SQL>ALTER TABLE Case ADD CONSTRAINT fk_case_judge FOREIGN KEY (Judge_ID) REFERENCES Judge(Judge_ID);

TABLE ALTERED

SQL>ALTER TABLE Court ADD CONSTRAINT fk_court_case FOREIGN KEY (Case_ID) REFERENCES Case(Case_ID);

TABLE ALTERED

SQL>ALTER TABLE Judge ADD CONSTRAINT fk_judge_court FOREIGN KEY (Court_ID) REFERENCES Court(Court_ID);

TABLE ALTERED

SQL>ALTER TABLE Judge ADD CONSTRAINT fk_judge_case FOREIGN KEY (Case_ID) REFERENCES Case(Case_ID);

TABLE ALTERED

SQL>ALTER TABLE Lawyer ADD CONSTRAINT fk_lawyer_case FOREIGN KEY (Case_ID) REFERENCES Case(Case_ID);

TABLE ALTERED

SQL>ALTER TABLE Party ADD CONSTRAINT fk_party_lawyer FOREIGN KEY (Lawyer_ID) REFERENCES Lawyer(Lawyer_ID);

TABLE ALTERED

SQL>ALTER TABLE Party ADD CONSTRAINT fk_party_case FOREIGN KEY (Case_ID) REFERENCES Case(Case_ID);

TABLE ALTERED

SQL>ALTER TABLE Hearing ADD CONSTRAINT fk_hearing_case FOREIGN KEY (Case_ID) REFERENCES Case(Case_ID);

TABLE ALTERED

SQL>ALTER TABLE Document ADD CONSTRAINT fk_document_case FOREIGN KEY (Case_ID) REFERENCES Case(Case_ID);

TABLE ALTERED

NOT NULL:

SQL>ALTER TABLE Judge MODIFY Judge_Name VARCHAR(100) NOT NULL;

TABLE ALTERED

UNIQUE:

SQL>ALTER TABLE Lawyer ADD CONSTRAINT unique_contact UNIQUE (Contact_Info);

TABLE ALTERED

CHECK:

SQL>ALTER TABLE Case ADD CONSTRAINT chk_case_type CHECK (Case_Type IN ('Civil', 'Criminal', 'Family', 'Labor', 'Tax', 'Commercial', 'Divorce'));

TABLE ALTERED

TCL COMMAND:-

SQL>COMMIT;

★ DDL COMMANDS:-

Add a New Column to a Table

SQL>ALTER TABLE Lawyer ADD Bar_Registration_No VARCHAR(20);

TABLE ALTERED

Rename an Existing Column

SQL>ALTER TABLE Case RENAME COLUMN Case_Type TO Case_Category;

TABLE ALTERED

Modify a Column Data Type

SQL>ALTER TABLE Court MODIFY Location VARCHAR(150);

TABLE ALTERED

Set a Default Value for a Column

SQL>ALTER TABLE Judge MODIFY Designation VARCHAR(50) DEFAULT 'Judge';

TABLE ALTERED

Drop a Column from a Table

SQL>ALTER TABLE Party DROP COLUMN Role;

TABLE DROPPED

Drop a Table

SQL>DROP TABLE Hearing;

TABLE DROPPED

Rename a Table

SQL>RENAME Document TO Case_Documents; Table renamed.

Truncate Table

SQL>TRUNCATE Table Court;

Table truncated.

★ DML COMMANDS:-

Change judge designation

SQL>UPDATE Judge SET Designation = 'Senior Civil Judge' WHERE Judge_ID = 402;

1 row updated.

Update hearing outcome

SQL>UPDATE Hearing SET Outcome = 'Judgment Reserved' WHERE Hearing_ID = 702; 1 row updated.

Correct case title

SQL>UPDATE Case SET Title = 'Priya vs ABC Ltd' WHERE Case_ID = 302;
1 row updated.

Change court location

SQL>UPDATE Court SET Location = 'New Chennai' WHERE Court_ID = 202;
1 row updated.

Delete a document

SQL>DELETE FROM CASE_DOCUMENTS WHERE Document_ID = 810; 1 row deleted.

View all judges

SQL>SELECT * FROM Judge;

JUDGE_ID JUDGE_NAME DESIGNATION COURT_ID CASE_ID

401 Justice R. Subramania	an High Court Judge	2	201 301
402 Justice Priya Menon	Senior Civil Judge	202	302
403 Justice Dinesh Patil	Sessions Judge	203	303
404 Justice Anita Sharma	Family Judge	204	304
405 Justice K. Suresh	Commercial Judge	205	305
406 Justice Ramesh Iyer	Labor Judge	206	306
407 Justice Leela Devi	Family Judge	207	307
408 Justice Aslam Khan	Tax Judge	208	308
409 Justice Binod Das	Criminal Judge	209	309
410 Justice Kanchana Rao	Family Judge	210	310

10 rows selected.

View case details of 'Criminal' type

SQL>SELECT * FROM Case WHERE Case_Category= 'Criminal';

CASE_ID TITLE CASE_CATEGORY FILING_DATE COURT_ID

JUDGE_ID
-----301 Rajiv vs State of Tamil Nadu Criminal 10-JAN-20
201
401
303 State of Maharashtra vs Suresh Criminal 18-MAR-21
203
403
309 State of Odisha vs Ramesh Criminal 07-SEP-24
209
409

★ AGGREGATE FUNCTIONS AND SORTING:-

1. **COUNT** – Total Number of Cases SQL> SELECT COUNT(*) AS Total Cases FROM Case;

TOTAL_CASES
-----10

2. MIN / MAX - Earliest and Latest Case Filing Dates

SQL>SELECT MIN(Filing_Date) AS Earliest_Case,MAX(Filing_Date) AS Latest_Case FROM Case;

EARLIEST_ LATEST_CA ------10-JAN-20 22-OCT-25

3.ORDER BY - List Lawyers Alphabetically

SQL> SELECT Lawyer_ID, Lawyer_Name, Specialization FROM Lawyer ORDER BY Lawyer_Name ASC;

LAWYER_ID LAWYER_NAME SPECIALIZATION

501 Adv. Arjun Mehta Criminal Law

506 Adv. Deepika Rao Labor Law

507 Adv. Imran Siddiqui Family Law

510 Adv. Kiran Bedi Family Law

504 Adv. Neha Kapoor Family Law

509 Adv. Raghav Patnaik Criminal Law

503 Adv. Ravi Deshmukh Criminal Law

505 Adv. Rohit Jain Commercial Law

502 Adv. Sneha Nair Civil Litigation

508 Adv. Swati Joshi Tax Law

10 rows selected.

4. SUM/COUNT + GROUP BY - Total Hearings per Case

SQL> SELECT Case_ID, COUNT(*) AS Total_Hearings FROM Hearing GROUP BY Case_ID ORDER BY Total_Hearings DESC;

CASE_ID TOTAL_HEARINGS

301	1
302	1
303	1
304	1
310	1
306	1

307	1
308	1
309	1
305	1

10 rows selected.

5.AVG of Case_IDs by Category

SQL> SELECT Case_Category, AVG(Case_ID) AS Avg_CaseID FROM Case GROUP BY Case_Category;

CASE_CATEGORY	AVG_CASEID
Criminal	304.333333
Civil	302
Family	307
Commercial	305
Labor	306
Divorce	307
Tax	308

7 rows selected.

6.DESCRIBE THE TABLE STRUCTURE

SQL>DESC JUDGE;

Name	Null? Type
JUDGE_ID JUDGE NAME	NOT NULL NUMBER(38) NOT NULL
VARCHAR2(100)	

COURT ID NUMBER(38) CASE_ID NUMBER(38) 7.COUNT - Total number of cases SQL>SELECT COUNT(CASE_ID) "TOTAL CASES" FROM CASE: **TOTAL CASES** 10 8. Absolute Value SQL>SELECT ABS(20) "ABSOLUTE VALUE" FROM DUAL; ABSOLUTE VALUE 20 9.ROUND SQL>SELECT round (2678.96) "round" FROM Dual; round 2679 10.POWER SQL>SELECT power (3,2) "power" FROM Dual; power 9

VARCHAR2(50)

11.SQUARE ROOT

DESIGNATION

```
SQL> SELECT sqrt (25) "square root" FROM Dual;
square root
     5
12.EXPONENT
SQL>SELECT exp (5) "exponent" FROM Dual;
exponent
148.413159
13.GREATEST
SQL> SELECT greatest (45643,10458739,235870) "number"
FROM Dual;
  number
 10458739
14.LEAST
SQL>SELECT least (45643,10458739,235870) "number"
FROM Dual;
number
 45643
15.MODULOUS
SQL>SELECT mod (15,8) "number" FROM Dual;
  number
    7
```

```
16.TRUNC
SQL>SELECT trunc (138.356,1) "number" FROM Dual;
  number
  138.3
17.FLOOR
SQL>SELECT floor (28.6) "number" FROM Dual;
  number
    28
18.CEIL
SQL>SELECT ceil (38.6) "number" FROM Dual;
  number
    39
19.LOWERCASE
SQL> SELECT LOWER(JUDGE_NAME) FROM JUDGE;
LOWER(JUDGE_NAME)
justice r. subramanian
justice priya menon
justice dinesh patil
justice anita sharma
justice k. suresh
justice ramesh iyer
justice leela devi
justice aslam khan
justice binod das
```

instice	kanchana	ran
Justice	ranchana	ıau

10 rows selected.

20.INITCAP

SQL> SELECT INITCAP(JUDGE_NAME) FROM JUDGE;

INITCAP(JUDGE_NAME)

Justice R. Subramanian

Justice Priya Menon

Justice Dinesh Patil

Justice Anita Sharma

Justice K. Suresh

Justice Ramesh lyer

Justice Leela Devi

Justice Aslam Khan

Justice Binod Das

Justice Kanchana Rao

10 rows selected.

21.UPPERCASE

SQL> SELECT UPPER(JUDGE_NAME) FROM JUDGE;

UPPER(JUDGE_NAME)

JUSTICE R. SUBRAMANIAN

JUSTICE PRIYA MENON

JUSTICE DINESH PATIL

JUSTICE ANITA SHARMA

JUSTICE K. SURESH

JUSTICE RAMESH IYER

```
JUSTICE LEELA DEVI
JUSTICE ASLAM KHAN
JUSTICE BINOD DAS
JUSTICE KANCHANA RAO
10 rows selected.
22.ASCII
SQL> SELECT ascii ('a') FROM Dual;
ASCII('A')
    97
23.LENGTH
SQL> SELECT LENGTH('LOCATION') FROM DUAL;
LENGTH('LOCATION')
         8
24.LTRIM
SQL> SELECT Itrim ('table name', 'd') FROM Dual;
LTRIM
table name
25.RTRIM
SQL> SELECT rtrim ('table name', 'a') FROM Dual;
RTRIM
```

table name

★ SET OPERATORS:-

UNION:

SQL>SELECT Title FROM Case WHERE Case_Category = 'Criminal' UNION SELECT Title FROM Case WHERE Case_Category = 'Family';

TITLE

Rajiv vs State of Tamil Nadu

State of Maharashtra vs Suresh

State of Odisha vs Ramesh

Sunil vs Anjali

Kumar vs Kanchana

UNION ALL:

SQL>SELECT Case_Category FROM Case UNION ALL SELECT Document_Type FROM Case_Documents;

CASE_CATEGORY

Criminal

Civil

Criminal

Family

Commercial

Labor

Divorce

Tax

Criminal

Family

Evidence

CASE_CATEGORY

Legal

Evidence

Personal

Commercial

Labor

Legal

Financial

Evidence

19 rows selected.

INTERSECT:

SQL>SELECT Case_Category FROM Case INTERSECT SELECT Document_Type FROM Case_Documents;

CASE_CATEGORY
Commercial
Labor

★ JOINS:-

1. INNER JOIN: List all case titles with their court names and judges

SQL>SELECT c.Case_ID, c.Title, ct.Court_Name, j.Judge_Name FROM Case c INNER JOIN Court ct ON c.Court_ID = ct.Court_ID INNER JOIN Judge j ON c.Judge_ID = j.Judge_ID;

CASE	_ID TITLE	COURT_NAME	JUDGE_NAME
301	Rajiv vs State of Tamil Nadu	Madras High Court	Justice R. Subramanian
302	Priya vs ABC Corporation	Chennai Civil Court	Justice Priya Menon
303	State of Maharashtra vs Suresh	Mumbai Sessions Court	Justice Dinesh Patil
304	Sunil vs Anjali	Delhi Family Court	Justice Anita Sharma
305	Bharat Traders vs Esha Ltd	Ahmedabad Commercial Co	ourt Justice K. Suresh
306	Meena vs Sun Pharma	Pune Labor Court	Justice Ramesh Iyer
307	Ali vs Fatima	Hyderabad Family Court	Justice Leela Devi
308	XYZ Ltd vs Tax Dept.	Kolkata Tax Court	Justice Aslam Khan
309	State of Odisha vs Ramesh	Bhubaneswar Criminal Cour	t Justice Binod Das
310	Kumar vs Kanchana	Coimbatore Family Court	Justice Kanchana Rao

¹⁰ rows selected.

2. LEFT JOIN:

SQL>SELECT Case.Case_ID, Case.Title, Judge.Judge_Name, Judge.Designation FROM Case LEFT JOIN Judge ON Case.Judge_ID = Judge.Judge_ID;

CASE	E_ID TITLE	JUDGE_NAME	DESIGNATION
301	Rajiv vs State of Tamil Nadu	Justice R. Subramania	an High Court Judge
302	Priya vs ABC Corporation	Justice Priya Menon	Senior Civil Judge
303	State of Maharashtra vs Sure	sh Justice Dinesh Patil	Sessions Judge
304	Sunil vs Anjali	Justice Anita Sharma	Family Judge
305	Bharat Traders vs Esha Ltd	Justice K. Suresh	Commercial Judge
306	Meena vs Sun Pharma	Justice Ramesh lyer	Labor Judge
307	Ali vs Fatima	Justice Leela Devi Fa	amily Judge

308	XYZ Ltd vs Tax Dept.	Justice Aslam Khan	Tax Judge
309	State of Odisha vs Ramesh	Justice Binod Das	Criminal Judge
310	Kumar vs Kanchana	Justice Kanchana Rao	Family Judge

10 rows selected.

3. RIGHT JOIN:

SQL>SELECT I.Lawyer_Name, I.Specialization, c.Title FROM Lawyer I RIGHT JOIN Case c ON I.Case_ID = c.Case_ID;

Adv. Arjun Mehta Criminal Law Rajiv vs State of Tamil Nadu Adv. Sneha Nair Civil Litigation Priya vs ABC Corporation	
Adv. Ravi Deshmukh Criminal Law State of Maharashtra vs Sure	sh
Adv. Neha Kapoor Family Law Sunil vs Anjali	
Adv. Rohit Jain Commercial Law Bharat Traders vs Esha Ltd	
Adv. Deepika Rao Labor Law Meena vs Sun Pharma	
Adv. Imran Siddiqui Family Law Ali vs Fatima	
Adv. Swati Joshi Tax Law XYZ Ltd vs Tax Dept.	
Adv. Raghav Patnaik Criminal Law State of Odisha vs Ramesh	
Adv. Kiran Bedi Family Law Kumar vs Kanchana	

10 rows selected.

4. FULL OUTER JOIN:

SQL> SELECT Case.Case_ID, Case.Title, Hearing.Hearing_Date, Hearing.Outcome FROM Case FULL OUTER JOIN Hearing ON Case.Case_ID = Hearing.Case_ID;

CASE_ID TITLE	HEARING_DATE	OUTCOME
301 Rajiv vs State of Tamil Nadu	15-JAN-20	Adjourned
302 Priya vs ABC Corporation	20-FEB-21	Judgment Reserved
303 State of Maharashtra vs Suresh	1 25-MAR-2	1 In Progress
304 Sunil vs Anjali	10-APR-22	Reconciliation Failed
305 Bharat Traders vs Esha Ltd	18-MAY-22	Ongoing
306 Meena vs Sun Pharma	15-JUN-23	Partial Settlement
307 Ali vs Fatima	05-JUL-23	Reserved for Judgment
308 XYZ Ltd vs Tax Dept.	20-AUG-24	Further Hearing Scheduled
309 State of Odisha vs Ramesh	12-SEP-24	Adjourned
310 Kumar vs Kanchana	30-OCT-25	Judgment Passed

10 rows selected.

5. SELF JOIN: Find pairs of cases handled by the same judge

SELECT c1.Case_ID AS Case1, c2.Case_ID AS Case2, j.Judge_Name FROM Case c1 JOIN Case c2 ON c1.Judge_ID = c2.Judge_ID AND c1.Case_ID < c2.Case_ID JOIN Judge j ON c1.Judge_ID = j.Judge_ID;

NO ROWS SELECTED.

6. CROSS JOIN: All combinations of lawyers and judges

SQL>SELECT I.Lawyer_Name, j.Judge_Name FROM Lawyer I CROSS JOIN Judge j;

LAWYER_NAME	JUDGE_NAME
Adv. Arjun Mehta	Justice R. Subramanian Justice Priya Menon Justice Dinesh Patil Justice Anita Sharma Justice K. Suresh Justice Ramesh Iyer Justice Leela Devi Justice Aslam Khan Justice Binod Das Justice Kanchana Rao Justice R. Subramanian
LAWYER_NAME	JUDGE_NAME
Adv. Sneha Nair Adv. Sneha Nair Adv. Sneha Nair Adv. Sneha Nair Adv. Sneha Nair Adv. Sneha Nair Adv. Sneha Nair	Justice Priya Menon Justice Dinesh Patil Justice Anita Sharma Justice K. Suresh Justice Ramesh Iyer Justice Leela Devi Justice Aslam Khan

LAWYER_NAME	JUDGE_NAME
-------------	------------

Adv. Sneha Nair Justice Binod Das Adv. Sneha Nair Justice Kanchana Rao Adv. Ravi Deshmukh Justice R. Subramanian Adv. Ravi Deshmukh Justice Priya Menon

Adv. Ravi Deshmukh Justice Dinesh Patil Adv. Ravi Deshmukh Justice Anita Sharma Adv. Ravi Deshmukh Justice K. Suresh

Adv. Ravi Deshmukh Justice Ramesh Iyer Adv. Ravi Deshmukh Justice Leela Devi Adv. Ravi Deshmukh Justice Aslam Khan Adv. Ravi Deshmukh Justice Binod Das Adv. Ravi Deshmukh Justice Kanchana Rao Adv. Neha Kapoor Justice R. Subramanian Adv. Neha Kapoor Justice Priya Menon Adv. Neha Kapoor Justice Dinesh Patil

LAWYER_NAME JUDGE_NAME

Adv. Neha Kapoor Justice Anita Sharma Justice K. Suresh Adv. Neha Kapoor Adv. Neha Kapoor Justice Ramesh Iyer Adv. Neha Kapoor Justice Leela Devi Adv. Neha Kapoor Justice Aslam Khan Adv. Neha Kapoor Justice Binod Das Adv. Neha Kapoor Justice Kanchana Rao Adv. Rohit Jain Justice R. Subramanian Adv. Rohit Jain Justice Priya Menon Adv. Rohit Jain Justice Dinesh Patil Adv. Rohit Jain Justice Anita Sharma

LAWYER_NAME JUDGE_NAME

Adv. Rohit Jain Justice K. Suresh Adv. Rohit Jain Justice Ramesh Iyer Adv. Rohit Jain Justice Leela Devi Adv. Rohit Jain Justice Aslam Khan Adv. Rohit Jain Justice Binod Das Adv. Rohit Jain Justice Kanchana Rao Adv. Deepika Rao Justice R. Subramanian Adv. Deepika Rao Justice Priva Menon Adv. Deepika Rao Justice Dinesh Patil Adv. Deepika Rao Justice Anita Sharma Adv. Deepika Rao Justice K. Suresh

LAWYER_NAME JUDGE_NAME

Adv. Deepika Rao
Adv. Imran Siddiqui
Adv. Deepika Rao
Justice Ramesh Iyer
Justice Leela Devi
Justice Aslam Khan
Justice Ramesh Iyer

Adv. Imran Siddiqui Justice K. Suresh Adv. Imran Siddiqui Justice Ramesh Iyer

LAWYER_NAME JUDGE_NAME

Adv. Imran Siddiqui Justice Leela Devi

Adv. Imran Siddiqui Justice Aslam Khan

Adv. Imran Siddiqui Justice Binod Das Adv. Imran Siddiqui Justice Kanchana Rao

Adv. Illian Siddiqui Sustice Ranchana Rao

Adv. Swati Joshi Justice R. Subramanian

Adv. Swati Joshi Uustice Priya Menon

Adv. Swati Joshi Ustice Dinesh Patil

Adv. Swati Joshi Uustice Anita Sharma

Adv. Swati Joshi Uustice K. Suresh

Adv. Swati Joshi Ustice Ramesh Iyer

Adv. Swati Joshi Uustice Leela Devi

LAWYER_NAME JUDGE_NAME

Adv. Swati Joshi Uustice Aslam Khan

Adv. Swati Joshi Uustice Binod Das

Adv. Swati Joshi Uustice Kanchana Rao

Adv. Raghav Patnaik Justice R. Subramanian

Adv. Raghav Patnaik Justice Priya Menon

Adv. Raghav Patnaik Justice Dinesh Patil

Adv. Raghav Patnaik Justice Anita Sharma

Adv. Raghav Patnaik Justice K. Suresh

Adv. Raghav Patnaik Justice Ramesh lyer

Adv. Raghav Patnaik Justice Leela Devi

Adv. Raghav Patnaik Justice Aslam Khan

LAWYER_NAME JUDGE_NAME

Adv. Raghav Patnaik Justice Binod Das

Adv. Raghav Patnaik Justice Kanchana Rao

Adv. Kiran Bedi Ustice R. Subramanian

Adv. Kiran Bedi Uustice Priya Menon

Adv. Kiran Bedi Ustice Dinesh Patil

Adv. Kiran Bedi Uustice Anita Sharma

Adv. Kiran Bedi Ustice K. Suresh

Adv. Kiran Bedi Uustice Ramesh lyer

Adv. Kiran Bedi Uustice Leela Devi

Adv. Kiran Bedi Uustice Aslam Khan

Adv. Kiran Bedi Ustice Binod Das

LAWYER_NAME JUDGE_NAME

Adv. Kiran Bedi Uustice Kanchana Rao

7. JOIN with WHERE:

SQL> SELECT Lawyer_Name, Case.Title, Case.Case_Category FROM Lawyer, Case WHERE Lawyer.Case_ID = Case.Case_ID;

LAWYER NAME TITLE CASE CATEGORY Adv. Arjun Mehta Rajiv vs State of Tamil Nadu Criminal Adv. Sneha Nair Priya vs ABC Corporation Civil Adv. Ravi Deshmukh State of Maharashtra vs Suresh Criminal Adv. Neha Kapoor Sunil vs Anjali Family Bharat Traders vs Esha Ltd Commercial Adv. Rohit Jain Adv. Deepika Rao Meena vs Sun Pharma Labor Adv. Imran Siddiqui Ali vs Fatima Divorce Adv. Swati Joshi XYZ Ltd vs Tax Dept. Tax Adv. Raghav Patnaik State of Odisha vs Ramesh Criminal Adv. Kiran Bedi Kumar vs Kanchana Family

10 rows selected.

★ INTEGRITY CONSTRAINTS:-

SQL>SELECT * FROM Case;

CASE_ID TITLE	CASE_CATE	GORY FILING_I	DATE COURT_IE
JUDGE_ID			
301 Rajiv vs State of Tamil Na 401	du Criminal	10-JAN-20	201
302 Priya vs ABC Corporation 402	Civil	21-FEB-21	202
303 State of Maharashtra vs S	Suresh Crimina	ıl 18-MAR-21	203

CASE_ID TITLE CASE_CATEGORY FILING_DATE COURT_ID JUDGE_ID 304 Sunil vs Anjali Family 05-APR-22 204 404 305 Bharat Traders vs Esha Ltd Commercial 20-MAY-22 205 405 306 Meena vs Sun Pharma Labor 11-JUN-23 206 406 CASE ID TITLE CASE CATEGORY FILING DATE COURT ID JUDGE_ID 307 Ali vs Fatima Divorce 01-JUL-23 207 407 308 XYZ Ltd vs Tax Dept. Tax 15-AUG-24 208 408 309 State of Odisha vs Ramesh Criminal 07-SEP-24 209 409 CASE_ID TITLE CASE_CATEGORY FILING_DATE COURT_ID JUDGE_ID 310 Kumar vs Kanchana Family 22-OCT-25 210 410 10 rows selected. SQL>SELECT * FROM Lawyer; LAWYER_ID LAWYER_NAME SPECIALIZATION CONTACT_INFO ______ CASE ID BAR REGISTRATION NO 501 Adv. Arjun Mehta Criminal Law arjunmehta@gmail.com 301

502 Adv. Sneha Nair Civil Litigation snehanair@lawfirm.com

302

503 Adv. Ravi Deshmukh Criminal Law ravideshmukh@courtmail.co

303

LAWYER_ID LAWYER_NAME SPECIALIZATION CONTACT_INFO

CASE_ID BAR_REGISTRATION_NO

504 Adv. Neha Kapoor Family Law nehakapoor@lawchambers.co m

304

505 Adv. Rohit Jain Commercial Law rohitjain@firm.co.in

305

506 Adv. Deepika Rao Labor Law deepikarao@legal.org

LAWYER_ID LAWYER_NAME SPECIALIZATION CONTACT_INFO

CASE_ID BAR_REGISTRATION_NO

306

507 Adv. Imran Siddiqui Family Law imransiddiqui@law.co

307

508 Adv. Swati Joshi Tax Law swatijoshi@taxfirm.com

308

509 Adv. Raghav Patnaik Criminal Law raghavp@justice.org

LAWYER_ID LAWYER_NAME SPECIALIZATION CONTACT_INFO

CASE_ID BAR_REGISTRATION_NO

309

510 Adv. Kiran Bedi Family Law kiranbedi@familylaw.in

310

10 rows selected.

SQL> SELECT * FROM Lawyer;

LAWYER_ID LAWYER_NAME SPECIALIZATION CONTACT_INFO CASE_ID BAR_REGISTRATION_NO 501 Adv. Arjun Mehta Criminal Law arjunmehta@gmail.com 301 502 Adv. Sneha Nair Civil Litigation snehanair@lawfirm.com 302 503 Adv. Ravi Deshmukh Criminal Law ravideshmukh@courtmail.co 303 LAWYER ID LAWYER NAME SPECIALIZATION CONTACT INFO ----CASE_ID BAR_REGISTRATION_NO 504 Adv. Neha Kapoor Family Law nehakapoor@lawchambers.co m 304 505 Adv. Rohit Jain Commercial Law rohitjain@firm.co.in 305 506 Adv. Deepika Rao Labor Law deepikarao@legal.org LAWYER_ID LAWYER_NAME SPECIALIZATION CONTACT_INFO CASE_ID BAR_REGISTRATION_NO 306 507 Adv. Imran Siddiqui Family Law imransiddiqui@law.co 307 508 Adv. Swati Joshi Tax Law swatijoshi@taxfirm.com 308 509 Adv. Raghav Patnaik Criminal Law raghavp@justice.org LAWYER_ID LAWYER_NAME SPECIALIZATION CONTACT INFO CASE_ID BAR_REGISTRATION_NO 309

510 Adv. Kiran Bedi Family Law kiranbedi@familylaw.in 310

10 rows selected.

SQL>SELECT

Lawyer_ID,Lawyer_Name,Specialization,Contact_Info,Case.Case_ID,Title,Case_Category FROM Lawyer,Case
WHERE Lawyer.Case ID = Case.Case ID;

LAWYER_ID LAWYER_NAME SPECIALIZATION CONTACT_INFO

CASE_ID TITLE CASE_CATEGORY

501 Adv. Arjun Mehta Criminal Law arjunmehta@gmail.com 301 Rajiv vs State of Tamil Nadu Criminal

502 Adv. Sneha Nair Civil Litigation snehanair@lawfirm.com 302 Priya vs ABC Corporation Civil

503 Adv. Ravi Deshmukh Criminal Law ravideshmukh@courtmail.co m

303 State of Maharashtra vs Suresh Criminal

LAWYER_ID LAWYER_NAME SPECIALIZATION CONTACT_INFO
------CASE ID TITLE CASE CATEGORY

504 Adv. Neha Kapoor Family Law nehakapoor@lawchambers.co

m

304 Sunil vs Anjali Family

505 Adv. Rohit Jain Commercial Law rohitjain@firm.co.in 305 Bharat Traders vs Esha Ltd Commercial

506 Adv. Deepika Rao Labor Law deepikarao@legal.org

LAWYER_ID LAWYER_NAME SPECIALIZATION CONTACT_INFO

CASE_ID TITLE CASE_CATEGORY

306 Meena vs Sun Pharma Labor

507 Adv. Imran Siddigui Family Law imransiddigui@law.co 307 Ali vs Fatima Divorce

508 Adv. Swati Joshi Tax Law swatijoshi@taxfirm.com 308 XYZ Ltd vs Tax Dept. Tax

509 Adv. Raghav Patnaik Criminal Law raghavp@justice.org

LAWYER_ID LAWYER_NAME SPECIALIZATION

CONTACT INFO

CASE ID TITLE

CASE_CATEGORY

309 State of Odisha vs Ramesh Criminal

510 Adv. Kiran Bedi Family Law 310 Kumar vs Kanchana Family

kiranbedi@familylaw.in

10 rows selected.

★ VIEW:-

CREATE VIEW:

SQL> CREATE VIEW Case Judge View AS SELECT c.Case ID, c.Title AS Case_Title, j.Judge_Name, j.Designation FROM Case c JOIN Judge j ON c.Judge ID = j.Judge ID;

View created.

SQL> SELECT * FROM Case_Judge_View;

Case ID Case Title Judge Name Designation

301 Rajiv vs State of Tamil Nadu Justice R. Subramanian High Court Judge

302 Priya vs ABC Corporation	Justice Priya Menon	Senior Civil Judge
303 State of Maharashtra vs Sures	sh Justice Dinesh Patil	Sessions Judge
304 Sunil vs Anjali	Justice Anita Sharma	Family Judge
305 Bharat Traders vs Esha Ltd	Justice K. Suresh	Commercial Judge
306 Meena vs Sun Pharma	Justice Ramesh lyer	Labor Judge
307 Ali vs Fatima	Justice Leela Devi	Family Judge
308 XYZ Ltd vs Tax Dept.	Justice Aslam Khan	Tax Judge
309 State of Odisha vs Ramesh	Justice Binod Das	Criminal Judge
310 Kumar vs Kanchana	Justice Kanchana Rao	Family Judge
10 rows selected		

CREATE OR REPLACE VIEW:

SQL> CREATE OR REPLACE VIEW Case_Judge_View AS SELECT c.Case_ID,c.Title AS Case_Title,j.Judge_Name,j.Designation,ct.Court_Name FROM Case c JOIN Judge j ON c.Judge_ID = j.Judge_ID JOIN Court ct ON c.Court_ID = ct.Court_ID;

View created.

SQL> SELECT * FROM Case_Judge_View; Case ID Case Title Judge Name Designation COURT_NAME 301 Rajiv vs State of Tamil Nadu Justice R. Subramanian High Court Judge Madras High Court 302 Priya vs ABC Corporation Justice Priya Menon Senior Civil Judge Chennai Civil Court 303 State of Maharashtra vs Suresh Justice Dinesh Patil Sessions Judge Mumbai Sessions Court

304 Sunil vs Anjali Justice Anita Sharma Family Judge

Delhi Family Court

Ahmedabad Commercial Court

Pune Labor Court

307 Ali vs Fatima Justice Leela Devi Family Judge

Hyderabad Family Court

308 XYZ Ltd vs Tax Dept. Justice Aslam Khan Tax Judge

Kolkata Tax Court

Bhubaneswar Criminal Court

310 Kumar vs Kanchana Justice Kanchana Rao Family Judge

Coimbatore Family Court

10 rows selected.

DROP VIEW:

SQL> DROP VIEW Case Judge View;

View dropped.

★ PL/SQL:-

1. Hearing Table

SQL> DECLARE

2 hearing_rec Hearing%ROWTYPE;

3 BEGIN

4 SELECT * INTO hearing_rec

5 FROM Hearing

6 WHERE Hearing_ID = 701;

7

8 DBMS_OUTPUT.PUT_LINE('Hearing ID : ' || hearing_rec.Hearing_ID);

```
DBMS_OUTPUT.PUT_LINE('Date
                                    : ' || TO_CHAR(hearing_rec.Hearing_Date,
'DD-MON-YYYY'));
     DBMS OUTPUT.PUT LINE('Description : ' || hearing rec.Description);
     DBMS_OUTPUT.PUT_LINE('Outcome
                                          : ' || hearing_rec.Outcome);
11
12
     DBMS OUTPUT.PUT LINE('Case ID
                                         : ' || hearing rec.Case ID);
13 END;
14 /
OUTPUT:
Hearing ID : 701
        : 15-JAN-2020
Description: First hearing - charges framed
Outcome : Adjourned
Case ID
        : 301
PL/SQL procedure successfully completed.
2.Two Case table
SQL> DECLARE
 2
     TYPE lawyer rec type IS RECORD (
 3
       lawyer id
                   INT,
 4
       name
                  VARCHAR2(100),
 5
       specialization VARCHAR2(100),
 6
       case id
                   INT
 7
     );
 8
 9
     lawyer1 lawyer_rec_type;
10
     lawyer2 lawyer rec type;
11 BEGIN
12
    -- Assign values
13
     lawyer1.lawyer id := 501;
14
     lawyer1.name
                         := 'Adv. Arjun Mehta';
15
     lawyer1.specialization := 'Criminal Law';
16
     lawyer1.case id
                         := 301;
17
18
     lawyer2.lawyer id := 502;
19
                         := 'Adv. Sneha Nair';
     lawyer2.name
20
     lawyer2.specialization := 'Civil Litigation';
21
     lawyer2.case id
                         := 302;
22
23
      -- Display
24
      DBMS_OUTPUT.PUT_LINE('Lawyer1: ' || lawyer1.name || ', Spec: ' ||
lawyer1.specialization | ', Case ID: ' | lawyer1.case id);
```

DBMS_OUTPUT.PUT_LINE('Lawyer2: ' || lawyer2.name || ', Spec: ' ||

lawyer2.specialization | ', Case ID: ' | lawyer2.case id);

25

```
26 END;
27 /
OUTPUT:
Lawyer1: Adv. Arjun Mehta, Spec: Criminal Law, Case ID: 301
Lawyer2: Adv. Sneha Nair, Spec: Civil Litigation, Case ID: 302
PL/SQL procedure successfully completed.
  ★ FUNCTIONS:-
1.Get Judge Name by Case ID
SQL> CREATE OR REPLACE FUNCTION Get_Judge_Name(p_case_id IN
NUMBER)
2 RETURN VARCHAR2
 3 IS
4
     v judge name VARCHAR2(100);
 5 BEGIN
6
     SELECT Judge Name
7
     INTO v judge name
8
     FROM Judge
     WHERE Case_ID = p_case_id;
9
10
11
     RETURN v judge name;
12 EXCEPTION
     WHEN NO DATA FOUND THEN
13
14
       RETURN 'No Judge Assigned';
15 END;
16 /
Function created.
SQL> DECLARE
     input_case_id NUMBER;
 3
     result VARCHAR2(100);
 4 BEGIN
     input case id := &enter case id;
6
     result := Get Judge Name(input case id);
7
```

DBMS OUTPUT_LINE('The Judge for Case ID ' || input_case_id || ' is: ' ||

8

result); 9 END; 10 /

OUTPUT:

```
Enter value for enter_case_id: 305
old 5: input_case_id := &enter_case_id;
new 5: input_case_id := 305;
The Judge for Case ID 305 is: Justice K. Suresh
```

```
2.Get Lawyer Specialization using Lawyer_ID
SQL> CREATE OR REPLACE FUNCTION
Get Lawyer Specialization(p lawyer id IN NUMBER)
 2 RETURN VARCHAR2
 3 IS
 4
     v_spec VARCHAR2(100);
 5 BEGIN
 6
     SELECT Specialization
 7
     INTO v spec
 8
     FROM Lawyer
 9
     WHERE Lawyer_ID = p_lawyer_id;
10
11
     RETURN v_spec;
12 EXCEPTION
13
     WHEN NO DATA FOUND THEN
14
        RETURN 'No Lawyer Found';
15 END:
16 /
Function created.
SQL> DECLARE
 2
     input lawyer id NUMBER;
 3
     result VARCHAR2(100);
 4 BEGIN
 5
     input lawyer id := &enter lawyer id;
     result := Get_Lawyer_Specialization(input_lawyer_id);
 6
 7
     DBMS OUTPUT.PUT LINE('The Specialization of Lawyer ID' ||
input lawyer id || 'is: ' || result);
 9 END:
10 /
```

```
OUTPUT:
Enter value for enter lawyer id: 505
        input lawyer id := &enter lawyer id;
old 5:
new 5:
         input lawyer id := 505;
The Specialization of Lawyer ID 505 is: Commercial Law
PL/SQL procedure successfully completed.
3.Get Case Title using Judge_ID
SQL> CREATE OR REPLACE FUNCTION
Get Case Title By Judge(p judge id IN NUMBER)
 2 RETURN VARCHAR2
 3 IS
 4
     v_title VARCHAR2(200);
 5 BEGIN
     SELECT c.Title
 6
 7 INTO v title
 8
     FROM Case c
 9
     JOIN Judge | ON c.Case ID = j.Case ID
10 WHERE j.Judge ID = p judge id;
11
12
     RETURN v title;
13 EXCEPTION
14
     WHEN NO DATA FOUND THEN
15
        RETURN 'No Case Found for this Judge';
16 END;
17 /
Function created.
SQL> DECLARE
     input judge id NUMBER;
 3
     result VARCHAR2(200);
 4 BEGIN
 5
     input judge id := &enter judge id;
 6
     result := Get Case Title By Judge(input judge id);
```

DBMS OUTPUT.PUT LINE('The Case handled by Judge ID' ||

7

9 END;

input_judge_id || ' is: ' || result);

10 /

OUTPUT:

```
Enter value for enter judge id: 401
```

old 5: input_judge_id := &enter_judge_id;

new 5: input judge id := 401;

The Case handled by Judge ID 401 is: Rajiv vs State of Tamil Nadu

PL/SQL procedure successfully completed.

★ PACKAGES:-

1. Package to Get Hearing Outcome and Court Info

SQL> CREATE OR REPLACE PACKAGE Case_Hearing_Pkg AS

- 2 FUNCTION Get_Latest_Hearing_Outcome(p_case_id IN NUMBER) RETURN VARCHAR2:
 - 3 FUNCTION Get_Court_Name(p_case_id IN NUMBER) RETURN VARCHAR2;
 - 4 END Case_Hearing_Pkg;

5 /

Package created.

SQL> CREATE OR REPLACE PACKAGE BODY Case_Hearing_Pkg AS

2

- 3 FUNCTION Get_Latest_Hearing_Outcome(p_case_id IN NUMBER) RETURN VARCHAR2 IS
 - 4 v_outcome VARCHAR2(200);
 - 5 BEGIN
 - 6 SELECT Outcome INTO v outcome
- 7 FROM (SELECT Outcome FROM Hearing WHERE Case_ID = p_case_id ORDER BY Hearing_Date DESC)
 - 8 WHERE ROWNUM = 1;
 - 9 RETURN v outcome;
- 10 EXCEPTION
- 11 WHEN NO DATA FOUND THEN
- 12 RETURN 'No Hearing Found';
- 13 END Get Latest Hearing Outcome;

14

- 15 FUNCTION Get_Court_Name(p_case_id IN NUMBER) RETURN VARCHAR2 IS
- 16 v court VARCHAR2(100);
- 17 BEGIN
- 18 SELECT Court Name INTO v court

```
19
     FROM Court
20
     WHERE Case ID = p case id;
21
     RETURN v court;
22 EXCEPTION
23 WHEN NO DATA FOUND THEN
24
      RETURN 'No Court Found';
25
    END Get Court Name;
26
27 END Case Hearing Pkg;
28 /
Package body created.
SQL> SET SERVEROUTPUT ON;
SQL>
SQL> DECLARE
2 v outcome VARCHAR2(200);
 3 v court VARCHAR2(100);
 4 input id NUMBER := &enter case id;
5 BEGIN
6 v_outcome := Case_Hearing_Pkg.Get_Latest_Hearing_Outcome(input_id);
7 v court := Case_Hearing_Pkg.Get_Court_Name(input_id);
8
9 DBMS OUTPUT.PUT LINE('Court Name: ' | v court);
10 DBMS OUTPUT.PUT LINE('Latest Hearing Outcome: ' || v outcome);
11 END;
12 /
OUTPUT:
Enter value for enter case id: 302
old 4: input id NUMBER := &enter case id;
new 4: input id NUMBER := 302;
Court Name: Chennai Civil Court
Latest Hearing Outcome: Judgment Reserved
PL/SQL procedure successfully completed.
2. Case and Lawyer Info
SQL> CREATE OR REPLACE PACKAGE Small Case Pkg AS
 2 FUNCTION Get Case Lawyer Info(p case id IN NUMBER) RETURN
VARCHAR2;
3 END Small Case Pkg;
4 /
```

Package created.

```
SQL> CREATE OR REPLACE PACKAGE BODY Small Case Pkg AS
   FUNCTION Get Case Lawyer Info(p case id IN NUMBER) RETURN
VARCHAR2 IS
    v title VARCHAR2(200);
     v lawyer VARCHAR2(100);
6 BEGIN
 7
    SELECT Title, Lawyer Name
     INTO v_title, v_lawyer
8
9
     FROM Case c
10
     JOIN Lawyer I ON c.Case ID = I.Case ID
11
     WHERE c.Case ID = p case id;
12
13
    RETURN 'Case: ' || v_title || ', Lawyer: ' || v_lawyer;
14 EXCEPTION
15
     WHEN NO DATA FOUND THEN
16
       RETURN 'No Case or Lawyer Found';
17
    END Get Case Lawyer Info;
18
19 END Small Case Pkg;
20 /
Package body created.
SQL> SET SERVEROUTPUT ON;
SQL>
SQL> DECLARE
2 v info VARCHAR2(300);
3 input id NUMBER := &enter case id;
4 BEGIN
5 v info := Small Case Pkg.Get Case Lawyer Info(input id);
6 DBMS OUTPUT.PUT LINE(v info);
7 END;
8 /
OUTPUT:
Enter value for enter case id: 309
old 3: input_id NUMBER := &enter_case_id;
new 3: input id NUMBER := 309;
Case: State of Odisha vs Ramesh, Lawyer: Adv. Raghav Patnaik
```

★ CURSORS

1.List All Judges

```
SQL> DECLARE
     CURSOR judge cur IS
      SELECT judge id, judge name, designation
 3
 4
      FROM judge;
 5
 6
    v id judge.judge id%TYPE;
 7
     v name judge.judge name%TYPE;
 8
     v desg judge.designation%TYPE;
 9 BEGIN
10
     OPEN judge cur;
11
     LOOP
12
       FETCH judge cur INTO v id, v name, v desg;
13
       EXIT WHEN judge cur%NOTFOUND;
14
15
       DBMS_OUTPUT_LINE('Judge ID: ' || v_id ||
16
                   ', Name: ' || v name ||
17
                   ', Designation: ' || v_desg);
18
     END LOOP;
19
     CLOSE judge cur;
20 END;
21 /
Judge ID: 401, Name: Justice R. Subramanian, Designation: High Court Judge
Judge ID: 402, Name: Justice Priya Menon, Designation: Senior Civil Judge
Judge ID: 403, Name: Justice Dinesh Patil, Designation: Sessions Judge
Judge ID: 404, Name: Justice Anita Sharma, Designation: Family Judge
Judge ID: 405, Name: Justice K. Suresh, Designation: Commercial Judge
Judge ID: 406, Name: Justice Ramesh Iver, Designation: Labor Judge
Judge ID: 407, Name: Justice Leela Devi, Designation: Family Judge
Judge ID: 408, Name: Justice Aslam Khan, Designation: Tax Judge
Judge ID: 409, Name: Justice Binod Das, Designation: Criminal Judge
Judge ID: 410, Name: Justice Kanchana Rao, Designation: Family Judge
```

PL/SQL procedure successfully completed.

2. Cursor with JOIN - Lawyers and Parties

```
SQL> DECLARE
```

- 2 CURSOR party lawyer cur IS
- 3 SELECT p.party name, p.party id, l.lawyer name, l.specialization
- 4 FROM party p
- 5 JOIN lawyer I ON p.lawyer id = I.lawyer id;

```
6
 7 BEGIN
 8
     FOR rec IN party lawyer cur LOOP
       DBMS OUTPUT.PUT LINE('Party: ' || rec.party name ||
 9
10
                     '| Lawyer: '|| rec.lawyer name ||
11
                    '('|| rec.specialization || ')');
12
      END LOOP;
13 END;
14 /
Party: Rajiv | Lawyer: Adv. Arjun Mehta (Criminal Law)
Party: State of Tamil Nadu | Lawyer: Adv. Arjun Mehta (Criminal Law)
Party: Priya | Lawyer: Adv. Sneha Nair (Civil Litigation)
Party: ABC Corporation | Lawyer: Adv. Sneha Nair (Civil Litigation)
Party: Sunil | Lawyer: Adv. Neha Kapoor (Family Law)
Party: Anjali | Lawyer: Adv. Neha Kapoor (Family Law)
Party: Ali | Lawyer: Adv. Imran Siddiqui (Family Law)
Party: Fatima | Lawyer: Adv. Imran Siddiqui (Family Law)
Party: Kumar | Lawyer: Adv. Kiran Bedi (Family Law)
Party: Kanchana | Lawyer: Adv. Kiran Bedi (Family Law)
```

PL/SQL procedure successfully completed.

3. Cursor with Court Details

```
SQL> DECLARE
 2
     CURSOR court cur IS
 3
       SELECT court id, court name, location, type
 4
       FROM court:
 5
 6 BEGIN
 7
     FOR rec IN court cur LOOP
 8
       DBMS OUTPUT.PUT LINE('Court: ' || rec.court name ||
 9
                   ' | Location: ' | rec.location |
10
                    ' | Type: ' || rec.type);
11
     END LOOP:
12 END;
13 /
Court: Madras High Court | Location: Chennai | Type: High Court
Court: Chennai Civil Court | Location: Chennai | Type: Civil Court
Court: Mumbai Sessions Court | Location: Mumbai | Type: Sessions Court
Court: Delhi Family Court | Location: Delhi | Type: Family Court
Court: Ahmedabad Commercial Court | Location: Ahmedabad | Type: Commercial
Court
Court: Pune Labor Court | Location: Pune | Type: Labor Court
```

Court: Hyderabad Family Court | Location: Hyderabad | Type: Family Court

Court: Kolkata Tax Court | Location: Kolkata | Type: Tax Court

Court: Bhubaneswar Criminal Court | Location: Bhubaneswar | Type: Criminal Court

Court: Coimbatore Family Court | Location: Coimbatore | Type: Family Court

PL/SQL procedure successfully completed.

4. Count Hearings Fetched

```
SQL> DECLARE
 2
     CURSOR hearing cur IS
 3
      SELECT hearing id, hearing date, outcome FROM hearing;
 4
 5
    v id
           hearing.hearing id%TYPE;
 6
    v date hearing.hearing date%TYPE;
 7
    v out hearing.outcome%TYPE;
 8 BEGIN
 9
    OPEN hearing cur;
10
     LOOP
11
       FETCH hearing cur INTO v id, v date, v out;
12
       EXIT WHEN hearing cur%NOTFOUND;
13
14
       DBMS_OUTPUT_LINE('Fetched Hearing ' ||
hearing cur%ROWCOUNT ||
15
                  ': ID=' || v_id || ', Outcome=' || v_out);
16
     END LOOP;
17
     CLOSE hearing cur;
18 END;
19 /
Fetched Hearing 1: ID=701, Outcome=Adjourned
Fetched Hearing 2: ID=702, Outcome=Judgment Reserved
Fetched Hearing 3: ID=703, Outcome=In Progress
Fetched Hearing 4: ID=704, Outcome=Reconciliation Failed
Fetched Hearing 5: ID=705, Outcome=Ongoing
Fetched Hearing 6: ID=706, Outcome=Partial Settlement
Fetched Hearing 7: ID=707, Outcome=Reserved for Judgment
Fetched Hearing 8: ID=708, Outcome=Further Hearing Scheduled
Fetched Hearing 9: ID=709, Outcome=Adjourned
Fetched Hearing 10: ID=710, Outcome=Judgment Passed
Fetched Hearing 11: ID=711, Outcome=Pending
```

★ TRIGGER

```
1.Trigger – Log Hearing Insertions
SQL> CREATE OR REPLACE TRIGGER trg hearing log
2 AFTER INSERT ON Hearing
 3 FOR EACH ROW
 4 BEGIN
    DBMS OUTPUT.PUT LINE('New Hearing Added: ' || :NEW.Hearing ID ||
               on ' || TO CHAR(:NEW.Hearing Date, 'DD-MON-YYYY') ||
6
 7
               'for Case '||:NEW.Case ID);
8 END;
9 /
Trigger created.
SQL> INSERT INTO Hearing VALUES (711,
TO DATE('12-DEC-2025','DD-MON-YYYY'), 'Additional arguments', 'Pending', 301);
New Hearing Added: 711 on 12-DEC-2025 for Case 301
1 row created.
2.Document Trigger – Auto Date if NULL
SQL> CREATE OR REPLACE TRIGGER trg doc auto date
 2 BEFORE INSERT ON DOCUMENTS
 3 FOR EACH ROW
4 BEGIN
```

```
IF: NEW. Submission Date IS NULL THEN
      :NEW.Submission Date := SYSDATE;
6
      DBMS OUTPUT.PUT LINE('Auto Date Set for Document ID: ' ||
:NEW.Document ID);
8
    END IF:
9 END;
10 /
```

Trigger created.

SQL> INSERT INTO Documents VALUES (811, 'Court Notice', 'Legal', NULL, 302); Auto Date Set for Document ID: 811

1 row created.

3. Prevent deleting a case if hearings exist

```
QL> CREATE OR REPLACE TRIGGER trg_no_case_delete
2 BEFORE DELETE ON case
3 FOR EACH ROW
4 DECLARE
5 v_count NUMBER;
6 BEGIN
7 SELECT COUNT(*) INTO v count FROM hearing WHERE case id =
:OLD.case id;
8 IF v count > 0 THEN
      RAISE_APPLICATION_ERROR(-20001, 'Cannot delete case with
hearings.');
10 END IF;
11 END:
12 /
Trigger created.
Case with hearings:
SQL> DELETE FROM case WHERE case id = 301;
DELETE FROM case WHERE case_id = 301
OUTPUT:
ORA-20001: Cannot delete case with hearings.
Case without hearings:
SQL>DELETE FROM case WHERE case id = 302;
Output:
1 row deleted
```

★ EXCEPTION HANDLING

1.Handle "No Data Found" (Case not available)

SQL> DECLARE

```
2 v_title VARCHAR2(200);
```

3 BEGIN

```
4
    SELECT title
5
    INTO v_title
6
    FROM case -- no quotes needed
7
    WHERE case id = 999; 8
9
    DBMS_OUTPUT.PUT_LINE('Case Title: ' || v_title);
10
11 EXCEPTION
12
     WHEN NO DATA FOUND THEN
13
       DBMS OUTPUT.PUT LINE('No Case found with given ID.');
14
     WHEN OTHERS THEN
15
       DBMS_OUTPUT.PUT_LINE('Error: ' || SQLERRM);
16 END;
17 /
OUTPUT:
No Case found with given ID.
PL/SQL procedure successfully completed.
```

2. Handle Duplicate Insert into Judge Table

SQL> DECLARE

```
2 BEGIN
```

- 3 INSERT INTO judge (judge_id, judge_name, designation, court_id, case_id)
- 4 VALUES (401, 'Justice Kumar', 'High Court Judge', 201, 301);

5

6 DBMS OUTPUT.PUT LINE('Judge Inserted Successfully');

OUTPUT:

14 /

Duplicate Judge ID not allowed.

PL/SQL procedure successfully completed.

3. Custom Exception: Prevent Lawyer Without Case

```
SQL> DECLARE
```

- 2 e_no_case EXCEPTION;
- 3 v case id NUMBER := NULL; -- Example missing case
- 4 BEGIN
- 5 IF v case id IS NULL THEN
- 6 RAISE e_no_case;
- 7 END IF:

8

- 9 INSERT INTO lawyer (lawyer_id, lawyer_name, specialization, contact_info, case_id, bar_registration_no)
- 10 VALUES (601, 'Adv. Sharma', 'Criminal Law', '9876543210', v_case_id, 'TN12345');

```
11
12 DBMS_OUTPUT.PUT_LINE(' Lawyer Inserted Successfully');
13
14 EXCEPTION
15 WHEN e_no_case THEN
16 DBMS_OUTPUT.PUT_LINE('Lawyer must be assigned to a case.');
17 WHEN OTHERS THEN
18 DBMS_OUTPUT.PUT_LINE(' Error: ' || SQLERRM);
19 END;
20 /
```

OUTPUT:

Lawyer must be assigned to a case.