

Group - 5 CipherX (G4)

Top - 3 Queries

1. Officer case closure rates

```
SELECT
    po.p_personID AS officer_id,
    per.name AS officer_name,
    COUNT(*) AS total_cases,
    COUNT(cd.end_date) AS closed_cases,
    ROUND (
        COUNT(cd.end_date) * 100.0 / COUNT(*) ,
        2
    ) AS closure_rate_percentage
FROM
    assigned_to at
JOIN
    police_officer po ON at.p_personID = po.p_personID
JOIN
    person per ON po.p_personID = per.personID
JOIN
    case_details cd ON at.case_id = cd.case_id AND at.open_date =
cd.open_date
GROUP BY
    po.p_personID, per.name
ORDER BY
    closure_rate_percentage DESC;
```

	officer_id integer	officer_name character varying (100)	total_cases bigint	closed_cases bigint	closure_rate_percentage numeric
1	202	Officer B	1	1	100.00
2	201	Officer A	2	1	50.00

2. All Important Details Related To A Case

```
CREATE VIEW all_case_details AS
SELECT cd.case_id, cd.open_date, cd.crime_date,
       cd.end_date, cd.complaintDetails,
       cd.crime_type,
       cl.place_name AS crime_place,
       cl.district AS crime_district,
       comp.name AS complainant_name,
       comp.contact_number AS complainant_contact,
       po.name AS police_name,
       p.rank AS police_rank,
       p.department AS police_department,
       crloc.place_name AS court_place,
       t.trial_date,
       t.hearing,
       j.name AS judge_name,
       v.name AS victim_name,
       vct.harm_details AS victim_harm,
       vct.family_contact AS victim_contact,
       crm.name AS criminal_name,
       pun.fine,
       pun.punish_start_date,
       pun.punish_end_date,
       pun.death_penalty,
       s.name AS suspect_name,
       sct.physical_description,
       sct.curr_arrest_status,
       w.name AS witness_name,
       wt.testimony,
       e.evidence_id,
       e.description AS evidence_description,
       e.collection_date,
       el.place_name AS evidence_place
FROM case_details cd
LEFT JOIN address cl ON cd.crime_location = cl.address_id
```

```

LEFT JOIN person comp ON cd.complainant_id = comp.personID
LEFT JOIN assigned_to a ON cd.case_id = a.case_id AND cd.open_date =
a.open_date
LEFT JOIN police_officer p ON a.p_personID = p.p_personID
LEFT JOIN person po ON p.p_personID = po.personID
LEFT JOIN tried_in tr ON cd.case_id = tr.case_id AND cd.open_date =
tr.open_date
LEFT JOIN court cr ON tr.court_id = cr.court_id AND tr.court_location =
cr.court_location
LEFT JOIN address crloc ON cr.court_location = crloc.address_id
LEFT JOIN trial t ON cd.case_id = t.case_id AND cd.open_date = t.open_date
LEFT JOIN person j ON t.judge_id = j.personID
LEFT JOIN affected_by ab ON cd.case_id = ab.case_id AND cd.open_date =
ab.open_date
LEFT JOIN victim vct ON ab.v_personID = vct.v_personID
LEFT JOIN person v ON vct.v_personID = v.personID
LEFT JOIN punishment pun ON cd.case_id = pun.case_id AND cd.open_date =
pun.open_date
LEFT JOIN criminal c ON pun.c_personID = c.c_personID
LEFT JOIN person crm ON c.c_personID = crm.personID
LEFT JOIN involved_in inv ON cd.case_id = inv.case_id AND cd.open_date =
inv.open_date
LEFT JOIN suspect sct ON inv.s_personID = sct.s_personID
LEFT JOIN person s ON sct.s_personID = s.personID
LEFT JOIN testifies_in ti ON cd.case_id = ti.case_id AND cd.open_date =
ti.open_date
LEFT JOIN witness wt ON ti.w_personID = wt.w_personID
LEFT JOIN person w ON wt.w_personID = w.personID
LEFT JOIN collected_for cf ON cd.case_id = cf.case_id AND cd.open_date =
cf.open_date
LEFT JOIN evidence e ON cf.evidence_id = e.evidence_id
LEFT JOIN address el ON e.evidence_location = el.address_id
WHERE cd.case_id = 101 AND cd.open_date = '2023-10-10'
;

```

```
-- SELECT * FROM all_case_details;
```

	case_id integer	open_date date	crime_date date	end_date date	complaintdetails character varying (255)	crime_type character (50)	crime_place character varying (100)
1	101	2023-10-10	2023-10-05	2023-10-12	Robbery at Main Street	Robbery ...	Nehru Nagar
crime_district character varying (100)	complainant_name character varying (100)	complainant_contact character (15)	police_name character varying (100)	police_rank character (50)	police_department character (50)		
Pune	John Doe	9876543210	Jane Smith	Sergeant ...	Criminal Investigati...		
court_place character varying (100)	trial_date date	hearing character varying (255)	judge_name character varying (100)	victim_name character varying (100)	victim_harm character varying (255)		
[null]	2023-10-11	Preliminary Hearing	George Clark	Sarah Williams	Stabbed in the arm		
victim_contact character (15)	criminal_name character varying (100)	fine integer	punish_start_date date	punish_end_date date	death_penalty character (3)	suspect_name character varying (100)	physical_description character varying (255)
6781234567	David Brown	5000	2023-10-12	2024-10-12	NO	David Brown	Tall, muscular, wearing a hoodie
curr_arrest_status character (10)	witness_name character varying (100)	testimony character varying (255)	evidence_id integer	evidence_description character varying (255)	collection_date date	evidence_place character varying (100)	
Arrested	Michael Johnson	I saw the suspect near the crime scene late at night.	1	Knife with blood stains	2023-10-06	Nehru Nagar	

3. List all *murder-type crimes* from the last 10 years in a specific district, showing

```
SELECT
    cd.case_id,
    cd.crime_date,
    a.district,
    CASE
        WHEN cd.end_date IS NULL THEN 'OPENED'
        ELSE p.name
    END AS criminal_status
FROM crime.case_details cd
JOIN crime.address a ON cd.crime_location = a.address_id
LEFT JOIN crime.punishment pn ON cd.case_id = pn.case_id AND cd.open_date
= pn.open_date
LEFT JOIN crime.criminal c ON pn.c_personID = c.c_personID
LEFT JOIN crime.person p ON c.c_personID = p.personID
WHERE
    LOWER(cd.crime_type) = 'murder' -- change criminal-type as needed
    AND cd.crime_date >= CURRENT_DATE - INTERVAL '10 years'
```

`AND LOWER(a.district) = LOWER('Ahmedabad'); -- change district as needed`

	case_id integer 🔒	crime_date date 🔒	district character varying (100) 🔒	criminal_status character varying 🔒
1	201	2017-01-05	Ahmedabad	Ajay Mehta
2	202	2018-03-14	Ahmedabad	OPENED
3	203	2019-05-18	Ahmedabad	Seema Joshi
4	204	2021-07-24	Ahmedabad	OPENED
5	205	2023-09-10	Ahmedabad	Sanjay Rao