Given the database below containing information about Romanian drivers, cars and road events (tables are huge, just a couple of records are displayed), write the SQL queries (Oracle dialect) for answering the following requirements:

cars

car_id	licence_plate	car_model_name	chasis_serial_number	manufacturing_year	displacement_cc	fuel_type	car_registration_city_id	car_registration_date
1000	IS-15-ABC	Renault Clio	K3345	2009	1400	Benzina	100	11/09/2009
800	VS-12-DEF	BMV X3	SK990	2013	2200	Diesel	150	11/11/2013
…								

driving_licences

drv_licence_id	drv_licence_date	driver_id	type_of_vehicles
2	01/04/2000	1	B
7	04/05/2001	1	A
…			

cities

city_id	city_name	county_abbrev
100	Iasi	IS
200	Bacau	BC
…		

drivers

driver_id	driver_national_code	driver_name	date_of_birth	city_driver_id
1	17802065578	Viteza Gica	06/02/1978	100
55	29012098890	Frana Ioana	09/12/1990	100

infringements_for_speed

infringement_id	allowed_max_speed	recorded_speed
47	60	78

infringements

infringement_id	infringement_date	infringement_details	city_infringement_id	driving_suspension_months	penalty_points	penalty_amount	driver_id	car_id
47	31/08/2014	Depășire viteză	200	NULL	2	200	1	1000
134	13/05/2015	Accidentare pieton	100	3	15	800	321	800
…								

payments

payment_id	payment_date	payment_order	city_payment_id	infringement_id	paid_amount
1425	19/05/2011	OP - AH2334	100	47	40
…					

Legend

displacement_cc - engine size (cubic centimeters)

city_infringement_id - the id of the city where the infringement was recorded

1. Extract the cars with the dispacement above 4000cc registered in the city of *Flamanzi* placed in the BT county
2. In how many speed infringements, the difference between recorded speed and the allowed speed was greater than 50 km/h?
3. Extract top 5 drivers with the largest number of infringements
4. Extract the county (its abbreviation) with the largest number of speed infringements
5. Display the drivers with infringements recorded in the city of Iasi (IS county) and also the city of Rosiori (NT county)
6. Compute the average penalty for infringements recorded in NT county for the year 2016.
7. Extract the cities for which the number of recorded infringements is greater than the number of infringements recorded in the city of Traian, NT county.
8. Extract the car models that were configured (sold) with **all possible** displacements smaller than 2000cc.
9. Display the drivers who fully paid their penalties "commited" in 2015
10. Extract the drivers having infringements recorded in **at least** the cities of the driver Popa Ana's infringements.
11. Get the number of infringements for the first quarter of 2017, by cities (see model)
12. With recursive SQL, get each driver's infringements list for 2014 (see model)
13. Using PIVOT, get every driver's number of infrigements on each year between 2010 and 2018 (see model)
14. Get infringements list for each driver; insert a column indicating the yearly ordinal number of each infringement (see model)

Report - requirement 11: the number of infringements for the first quarter of 2017, by cities

city_name	county_abbrev	Jan	Feb	Mar	Total trim.I
...	...				
Roman	NT	850	675	1452	2977
...					
County Total	NT				
...					
Total					

Report - requirement 12: each driver's infringements list for 2014

driver_name	driver_national_code	Infringements list for year 2014
...		
Frana Ioana	2990101401818	31/08/2014 - Depășire viteză; 11/11/2014 - Neacordare prioritate
...		

Report - requirement 13: every driver's number of infrigements on each year between 2010 and 2018

driver_name	driver_national_code	2010	2011	2012	2013	2014	2015	2016	2017	2018
...										
Frana Ioana	2990101401818	2	0	3	5	7	0	3	2	1
...										

Report - requirement 14: counting each driver's yearly infringements

driver_name	driver_national_code	infringement_id	infringement_date	penalty_amount	yearly_ordinal_number
...					
Frana Ioana	2990101401818	47	31/08/2014	200	1
Frana Ioana	2990101401818	89	20/10/2014	100	2
Frana Ioana	2990101401818	452	10/02/2015	500	1
Frana Ioana	2990101401818	844	30/06/2016	800	1
...					

Requirement	AvailablePoints	EarnedPoints
1	0,25	
2	0,25	
3	0,50	
4	0,25	
5	0,25	
6	0,25	
7	0,50	
8	1,25	
9	0,50	
10	1,50	
11	0,75	
12	1,75	
13	1,50	
14	1,50	
TOTAL	***11***	