



PRACTICA 1 BASES DE DADES

Fase 2

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Creació de les queries

```
--QUERY 1

SELECT COUNT(c.charge) AS "nsancions", v.color FROM Vehicle AS v, Infraccio AS i, Charge AS c
WHERE v.matricula = i.id_vehicle AND c.charge= i.charge
GROUP BY v.matricula ORDER BY count(c.charge) DESC LIMIT 1;

--QUERY 2

SELECT p.nom, c.race FROM Propietari AS p, Conductor AS c, Vehicle AS v
WHERE p.id_driver = c.id_driver AND v.id_prop = p.id_driver
AND (v.matricula LIKE '%1%' OR v.matricula LIKE '%2%' OR v.matricula LIKE '%3%' OR v.matricula LIKE '%4%' OR v.matricula LIKE '%5%')
ORDER BY v.make DESC, v.model, v.year;

--QUERY 3

SELECT matricula, year FROM(
    SELECT v.matricula AS matricula, v.year AS year FROM Infraccio AS i, Vehicle AS v
    WHERE v.year = 2007 AND v.matricula = i.id_vehicle AND ContributedToAccident = false AND i.Belts = true
    ORDER BY v.matricula DESC LIMIT 6
)AS sub
UNION ALL
SELECT matricula, year FROM(
    SELECT v.matricula AS matricula, v.year AS year FROM Infraccio AS i, Vehicle AS v
    WHERE v.year = 2008 AND v.matricula = i.id_vehicle AND ContributedToAccident = false AND i.Belts = true
    ORDER BY v.matricula ASC LIMIT 6
)AS sub
UNION ALL
SELECT matricula, year FROM(
    SELECT v.matricula AS matricula, v.year AS year FROM Infraccio AS i, Vehicle AS v
    WHERE v.year = 2009 AND v.matricula = i.id_vehicle AND ContributedToAccident = false AND i.Belts = true
    ORDER BY v.matricula DESC LIMIT 6
)AS sub
UNION ALL

SELECT matricula, year FROM(
    SELECT v.matricula AS matricula, v.year AS year FROM Infraccio AS i, Vehicle AS v
    WHERE v.year = 2010 AND v.matricula = i.id_vehicle AND ContributedToAccident = false AND i.Belts = true
    ORDER BY v.matricula ASC LIMIT 6
)AS sub
UNION ALL
SELECT matricula, year FROM(
    SELECT v.matricula AS matricula, v.year AS year FROM Infraccio AS i, Vehicle AS v
    WHERE v.year = 2011 AND v.matricula = i.id_vehicle AND ContributedToAccident = false AND i.Belts = true
    ORDER BY v.matricula DESC LIMIT 6
)AS sub
UNION ALL
SELECT matricula, year FROM(
    SELECT v.matricula AS matricula, v.year AS year FROM Infraccio AS i, Vehicle AS v
    WHERE v.year = 2012 AND v.matricula = i.id_vehicle AND ContributedToAccident = false AND i.Belts = true
    ORDER BY v.matricula ASC LIMIT 6
)AS sub
UNION ALL
SELECT matricula, year FROM(
    SELECT v.matricula AS matricula, v.year AS year FROM Infraccio AS i, Vehicle AS v
    WHERE v.year = 2013 AND v.matricula = i.id_vehicle AND ContributedToAccident = false AND i.Belts = true
    ORDER BY v.matricula DESC LIMIT 6
)AS sub
UNION ALL
SELECT matricula, year FROM(
    SELECT v.matricula AS matricula, v.year AS year FROM Infraccio AS i, Vehicle AS v
    WHERE v.year = 2014 AND v.matricula = i.id_vehicle AND ContributedToAccident = false AND i.Belts = true
    ORDER BY v.matricula ASC LIMIT 6
)AS sub
UNION ALL
SELECT matricula, year FROM(
    SELECT v.matricula AS matricula, v.year AS year FROM Infraccio AS i, Vehicle AS v
    WHERE v.year = 2015 AND v.matricula = i.id_vehicle AND ContributedToAccident = false AND i.Belts = true
    ORDER BY v.matricula DESC LIMIT 6
)AS sub
UNION ALL
```

```

UNION ALL
SELECT matricula, year FROM(
    SELECT v.matricula AS matricula, v.year AS year FROM Infraccio AS i, Vehicle AS v
    WHERE v.year = 2016 AND v.matricula = i.id_vehicle AND ContributedToAccident = false AND i.Belts = true
    ORDER BY v.matricula ASC LIMIT 6
)AS sub

--QUERY 4

SELECT DISTINCT Charge.description FROM Infraccio, Vehicle, Propietari, Conductor, Charge
WHERE (Charge.description LIKE '%a%' OR Charge.description LIKE '%A%') AND (Charge.description LIKE '%e%' OR Charge.description LIKE '%E%')
AND (Charge.description LIKE '%i%' OR Charge.description LIKE '%I%') AND (Charge.description LIKE '%o%' OR Charge.description LIKE '%O%')
AND (Charge.description LIKE '%u%' OR Charge.description LIKE '%U%')
AND Infraccio.id_vehicle = Vehicle.matricula AND charge.charge = Infraccio.charge AND Propietari.id_driver = Vehicle.id_prop
AND Propietari.id_driver = Conductor.id_driver AND Propietari.id_driver=Infraccio.id_driver AND (Conductor.gender ='F' AND Conductor.race ='BLACK' OR Vehicle.color='GOLD'

--QUERY 5

SELECT EXTRACT (year FROM i.Date_OfStop) AS any, COUNT(*) AS nincidents FROM Infraccio AS i
WHERE i.Alcohol=TRUE AND EXTRACT(month FROM i.Date_OfStop)=7 AND EXTRACT (day FROM i.Date_OfStop) BETWEEN 4 AND 5
GROUP BY EXTRACT (year FROM i.Date_OfStop) ORDER BY nincidents DESC LIMIT 1;

--QUERY 6

SELECT c.gender AS gènere, COUNT(i.id_infraccio) AS "nincidents" FROM Infraccio AS i, Conductor AS c
WHERE c.id_driver = i.id_driver
GROUP BY c.gender ORDER BY COUNT(i.id_infraccio) DESC LIMIT 1 ;

--QUERY 7

SELECT c.gender AS gènere, CAST((COUNT(i.id_infraccio)*100)AS FLOAT) / CAST((SELECT COUNT(i.id_infraccio) FROM Infraccio AS i)AS FLOAT)
AS "incidents_percentatge" FROM Infraccio AS i, Conductor AS c
WHERE c.id_driver = i.id_driver
GROUP BY c.gender

--QUERY 8

SELECT i.id_driver AS Identificador, p.nom AS Nom, 24-COUNT(i.alcohol=true)-(COUNT(i.belts=true)) AS "Punts Restants"
FROM Conductor AS c, Propietari AS p, Infraccio AS i
WHERE c.id_driver = p.id_driver AND i.id_driver = c.id_driver AND (i.alcohol= true OR i.belts=true)
GROUP BY i.id_driver,p.nom
ORDER BY "Punts Restants" ASC;

--QUERY 9

SELECT p.id_driver AS Identificador, p.nom, COUNT(*) AS "Num cotxes" FROM Propietari AS p, Vehicle AS v
WHERE v.id_prop = p.id_driver
GROUP BY p.id_driver
ORDER BY "Num cotxes" DESC LIMIT 1;

--QUERY 10

SELECT p.id_driver AS Identificador, p.nom, v.matricula, v.make AS Marca, v.model, v.year FROM Propietari AS p, Vehicle AS v
WHERE v.id_prop = p.id_driver AND v.color='BLACK'
ORDER BY v.year ASC LIMIT 4;

```

Captures de Pantalla

Queri 1

Codi

```
SELECT COUNT(c.charge) AS "nsancions", v.color FROM Vehicle AS v, Infraccio AS i, Charge AS c
WHERE v.matricula = i.id_vehicle AND c.charge= i.charge
GROUP BY v.matricula ORDER BY count(c.charge) DESC LIMIT 1 ;
```

Resultats

	nsancions bigint	color character varying (255)
1	945	GRAY

Captures de pantalla

```
327
328 SELECT COUNT(c.charge) AS "nsancions", v.color, v.matricula FROM Vehicle AS v, Infraccio AS i, Charge AS c
329 WHERE v.matricula = i.id_vehicle AND c.charge= i.charge
330 GROUP BY v.matricula ORDER BY count(c.charge) DESC LIMIT 1 ;
331
332
```

Data Output	Explain	History	Messages
nsancions bigint	color character varying (255)	matricula character varying (255)	
1	945 GRAY	MD-129246-TG	

Tot i que el resultat no és el que sortia a les solucions, en aquesta queri veiem la matricula del cotxe que a la nostra base de dades és el més sancionat.

```
332 SELECT COUNT(c.charge) AS "nsancions" FROM Infraccio AS i, Charge AS c
333 WHERE i.id_vehicle = 'MD-129246-TG' AND c.charge= i.charge
334 GROUP BY i.id_vehicle;
335
```

Data Output	Explain	History	Messages
nsancions bigint			
1	945		

Comprovem al realitzar una queri que conta quants cops apareix el cotxe amb aquesta matricula a les taules de infraccions que efectivament, es aquest cotxe.

```
336 SELECT v.color FROM Vehicle AS v
337 WHERE v.matricula = 'MD-129246-TG'
338 GROUP BY v.matricula;
339
```

Data Output	Explain	History	Messages
color character varying (255)			
1	GRAY		

Al buscar de quin color es, ens adonem que efectivament, es de color gris.

Queri 2

Codi

```
SELECT p.nom, c.race FROM Propietari AS p, Conductor AS c, Vehicle AS v
WHERE p.id_driver = c.id_driver AND v.id_prop = p.id_driver
AND (v.matricula LIKE '%1%' OR v.matricula LIKE '%2%' OR v.matricula LIKE '%3%' OR v.matricula LIKE '%4%' OR v.matricula LIKE '%5%')
ORDER BY v.make DESC, v.model, v.year;
```

Resultat

Data Output	Explain	History	Messages
	nom character varying (255)	race character varying (255)	
1	Koralle Patterson	OTHER	
2	Delaine Longshaw	BLACK	
3	Muire Ruddick	BLACK	
4	Frankie Kilbourn	WHITE	
5	Lyndell Hardwick	BLACK	
6	Seumas Listone	WHITE	
7	Milli Jewsbury	WHITE	
8	Charlean Fotitt	WHITE	
9	Elias Bodiam	HISPANIC	
10	Eli Husset	WHITE	
11	Cherie Cotherill	WHITE	

En aquest cas, la queri mostra exactament el que surt a les solucions. Tot i que, al provar de fer-ho amb un Windows, ens saltava els 4 primers propietaris i ens mostrava la mateixa llista però començant pel 4t conductor.

Queri 3

Codi

```
SELECT matricula, year FROM(
  SELECT v.matricula AS matricula, v.year AS year FROM Infraccio AS i, Vehicle AS v
  WHERE v.year = 2007 AND v.matricula = i.id_vehicle AND ContributedToAccident = false AND i.Belts = true
  ORDER BY v.matricula DESC LIMIT 6
)AS sub
UNION ALL
SELECT matricula, year FROM(
  SELECT v.matricula AS matricula, v.year AS year FROM Infraccio AS i, Vehicle AS v
  WHERE v.year = 2008 AND v.matricula = i.id_vehicle AND ContributedToAccident = false AND i.Belts = true
  ORDER BY v.matricula ASC LIMIT 6
)AS sub
SELECT matricula, year FROM(
  SELECT v.matricula AS matricula, v.year AS year FROM Infraccio AS i, Vehicle AS v
  WHERE v.year = 2009 AND v.matricula = i.id_vehicle AND ContributedToAccident = false AND i.Belts = true
  ORDER BY v.matricula DESC LIMIT 6
)AS sub
UNION ALL
SELECT matricula, year FROM(
  SELECT v.matricula AS matricula, v.year AS year FROM Infraccio AS i, Vehicle AS v
  WHERE v.year = 2010 AND v.matricula = i.id_vehicle AND ContributedToAccident = false AND i.Belts = true
  ORDER BY v.matricula ASC LIMIT 6
)AS sub
SELECT matricula, year FROM(
  SELECT v.matricula AS matricula, v.year AS year FROM Infraccio AS i, Vehicle AS v
  WHERE v.year = 2011 AND v.matricula = i.id_vehicle AND ContributedToAccident = false AND i.Belts = true
  ORDER BY v.matricula DESC LIMIT 6
)AS sub
UNION ALL
SELECT matricula, year FROM(
  SELECT v.matricula AS matricula, v.year AS year FROM Infraccio AS i, Vehicle AS v
  WHERE v.year = 2012 AND v.matricula = i.id_vehicle AND ContributedToAccident = false AND i.Belts = true
  ORDER BY v.matricula ASC LIMIT 6
)AS sub
SELECT matricula, year FROM(
  SELECT v.matricula AS matricula, v.year AS year FROM Infraccio AS i, Vehicle AS v
  WHERE v.year = 2013 AND v.matricula = i.id_vehicle AND ContributedToAccident = false AND i.Belts = true
  ORDER BY v.matricula DESC LIMIT 6
)AS sub
```

```

UNION ALL
SELECT matricula, year FROM(
    SELECT v.matricula AS matricula, v.year AS year FROM Infraccio AS i, Vehicle AS v
    WHERE v.year = 2014 AND v.matricula = i.id_vehicle AND ContributedToAccident = false AND i.Belts = true
    ORDER BY v.matricula ASC LIMIT 6
)AS sub
SELECT matricula, year FROM(
    SELECT v.matricula AS matricula, v.year AS year FROM Infraccio AS i, Vehicle AS v
    WHERE v.year = 2015 AND v.matricula = i.id_vehicle AND ContributedToAccident = false AND i.Belts = true
    ORDER BY v.matricula DESC LIMIT 6
)AS sub
UNION ALL
SELECT matricula, year FROM(
    SELECT v.matricula AS matricula, v.year AS year FROM Infraccio AS i, Vehicle AS v
    WHERE v.year = 2016 AND v.matricula = i.id_vehicle AND ContributedToAccident = false AND i.Belts = true
    ORDER BY v.matricula ASC LIMIT 6
)AS sub

```

Resultats

Data Output	Explain	Messages	Query History
matricula character varying (255)			year integer
1	WV-12346-SG		2007
2	WV-119235-MR		2007
3	WV-115555-HG		2007
4	WV-107759-CB		2007
5	WV-107668-CS		2007
6	WV-107668-CS		2007
7	AL-110255-CW		2008
8	AL-115863-GS		2008
9	AZ-108054-AB		2008
10	AZ-108054-AB		2008
11	CA-107653-BW		2008
12	CA-107653-BW		2008
13	VA-134256-YW		2009
14	VA-134256-YW		2009
15	VA-130260-VB		2009
16	VA-130260-VB		2009
17	LA-110046-RG		2009

Queri 4

Codi

```

SELECT DISTINCT Charge.description FROM Infraccio, Vehicle, Propietari, Conductor, Charge
WHERE (Charge.description LIKE '%a%' OR Charge.description LIKE '%A%') AND (Charge.description LIKE '%e%' OR Charge.description LIKE '%E%')
AND (Charge.description LIKE '%i%' OR Charge.description LIKE '%I%') AND (Charge.description LIKE '%o%' OR Charge.description LIKE '%O%')
AND (Charge.description LIKE '%u%' OR Charge.description LIKE '%U%')
AND Infraccio.id_vehicle = Vehicle.matricula AND charge.charge = Infraccio.charge AND Propietari.id_driver = Vehicle.id_prop
AND Propietari.id_driver = Conductor.id_driver AND Propietari.id_driver=Infraccio.id_driver AND (Conductor.gender ='F' AND Conductor.race ='BLACK'OR Vehicle.color = 'GOLD');

```

Resultats

	description character varying (255)
1	ABANDONING VEH. ON PUBLIC PROPERTY
2	ABANDONING VEH. ON PUBLIC PROPERTY W/O PE...
3	ALLOWING UNREG. VEH. TO BE DRIVEN ON HWY.
4	ALLOWING VEH. TO BE DRIVEN ON HWY. WITH SU...
5	ALLOWING VEHICLE TO BE DRIVEN ON HWY. WITH...
6	ATTACHING UNAUTHORIZED VEH. REG. PLATE WI...
7	ATTEMPT BY DRIV TO ELUDE POLICE IN OFFCAL P...
8	ATTEMPT BY DRIVER TO ELUDE POLICE IN OFFICIA...
9	ATTEMPT BY DRIVER TO ELUDE POLICE IN OFFICIA...
10	ATTEMPT BY DRIVER TO ELUDE UNIFORMED POLI...
11	ATTEMPT BY DRIVER TO ELUDE UNIFORMED POLI...
12	ATTEMPT BY DRIVER TO ELUDE UNIFORMED POLI...
13	BICYCLE, EPAMD, MOTOR SCOOTER OPERATOR C...
14	BRAKE HOSE INADEQUATE AND NOT SECURED A...
15	BRAKES ON TRUCK ARE INOPERATIVE
16	CARRYING LOOSE MATERIAL LOADED TO WITHIN ...
17	CAUSING STANDING VEH. TO OBSTRUCT FREE VE...
18	COMMFRICAL DRIVER FAIL IIRF TO NOTIFY MVA WI...

Captures de pantalla

```
402 SELECT DISTINCT Charge.description, Conductor.id_driver, vehicle.color FROM Infraccio, Vehicle, Propietari, Conductor, Charge
403 WHERE (Charge.description LIKE '%a%' OR Charge.description LIKE '%b%') AND (Charge.description LIKE '%a%' OR Charge.description LIKE '%b%')
404 AND (Charge.description LIKE '%i%' OR Charge.description LIKE '%j%') AND (Charge.description LIKE '%i%' OR Charge.description LIKE '%j%')
405 AND (Charge.description LIKE '%u%' OR Charge.description LIKE '%v%') AND (Charge.description LIKE '%u%' OR Charge.description LIKE '%v%')
406 AND Infraccio.id_vehicle = Vehicle.matricula AND charge.charge = Infraccio.charge AND Propietari.id_driver = Vehicle.id_prop
407 AND Propietari.id_driver = Conductor.id_driver AND Propietari.id_driver=Infraccio.id_driver AND (Conductor.gender = 'F' AND Conductor.race = 'BLACK' OR Vehicle.color = 'GOLD');
408
409
410 --QUERY 5: FUNCIONA
411
```

	description	id_driver	color
	character varying (255)	bigint	character varying (255)
1	ABANDONING VEH. ON PUBLIC PROPERTY	1623365	GOLD
2	ABANDONING VEH. ON PUBLIC PROPERTY	4332444	GOLD
3	ABANDONING VEH. ON PUBLIC PROPERTY W/O PE...	16577137	GOLD
4	ABANDONING VEH. ON PUBLIC PROPERTY W/O PE...	26484759	GREEN, LGT
5	ALLOWING UNREG. VEH. TO BE DRIVEN ON HWY.	7481316	SILVER
6	ALLOWING UNREG. VEH. TO BE DRIVEN ON HWY.	11634544	RED
7	ALLOWING UNREG. VEH. TO BE DRIVEN ON HWY.	16661652	BEDGE
8	ALLOWING UNREG. VEH. TO BE DRIVEN ON HWY.	18415864	GOLD
9	ALLOWING UNREG. VEH. TO BE DRIVEN ON HWY.	19216959	SILVER
10	ALLOWING UNREG. VEH. TO BE DRIVEN ON HWY.	35701424	WHITE
11	ALLOWING VEH. TO BE DRIVEN ON HWY. WITH SU...	2453361	RED
12	ALLOWING VEH. TO BE DRIVEN ON HWY. WITH SU...	3366975	GOLD
13	ALLOWING VEH. TO BE DRIVEN ON HWY. WITH SU...	3585585	SILVER
14	ALLOWING VEH. TO BE DRIVEN ON HWY. WITH SU...	4660083	RED
15	ALLOWING VEH. TO BE DRIVEN ON HWY. WITH SU...	4820472	GRAY
16	ALLOWING VEH. TO BE DRIVEN ON HWY. WITH SU...	4885312	BLUE
17	ALLOWING VEH. TO BE DRIVEN ON HWY. WITH SU...	7242117	RED
18	ALL PARKING UPON TOL RD PARKING FOR HWY	80174301	RED

Amb aquesta query podem veure que tot i que els resultats no son els de les solucions, els 3 primers Charges els mostra perquè el cotxe és de color “GOLD”.

```
408
409 SELECT Conductor.id_driver, Conductor.gender, Conductor.race FROM Conductor WHERE id_driver = '26484759';
410
411
```

	id_driver	gender	race
	bigint	character (3)	character varying (255)
1	26484759	F	BLACK

En el cas del 4t, que el color no és GOLD si busquem la informació del propietari veiem que es una dona de raça negra i per tant podem afirmar que la query és correcta.

Querí 5

Codi

```
SELECT EXTRACT (year FROM i.Date_OfStop) AS any, COUNT(*) AS nincidents FROM Infraccio AS i
WHERE i.Alcohol=TRUE AND EXTRACT(month FROM i.Date_OfStop)=7 AND EXTRACT (day FROM i.Date_OfStop) BETWEEN 4 AND 5
GROUP BY EXTRACT (year FROM i.Date_OfStop) ORDER BY nincidents DESC LIMIT 1;
```

Resultats

	any	nincidents
	double precision	bigint
1	2013	6

Queri 6

Codi

--QUERY 6: FUNCIONA

```
SELECT c.gender, COUNT(i.id_infraccio) AS "nincidents" FROM Infraccio AS i, Conductor AS c
WHERE c.id_driver = i.id_driver
GROUP BY c.gender ORDER BY COUNT(i.id_infraccio) DESC LIMIT 1 ;
```

Resultats

Data Output	Explain	History	Messages
gender	nincidents		
character (3)	bigint		
1 M	799072		

Captures de pantalla

388	
389	SELECT COUNT(i.id_infraccio) AS "nincidents" FROM Infraccio AS i, Conductor AS c
390	WHERE c.id_driver = i.id_driver AND c.gender = 'M'
391	GROUP BY c.gender ;
392	
Data Output	Explain History Messages
nincidents	
bigint	
1	799072

A aquesta queri es demostra com si contem el nombre d'incidents que han tingut persones de gènere masculí surt el mateix nombre.

388	
389	SELECT COUNT(i.id_infraccio) AS "nincidents" FROM Infraccio AS i, Conductor AS c
390	WHERE c.id_driver = i.id_driver AND c.gender = 'F'
391	GROUP BY c.gender ;
392	
Data Output	Explain History Messages
nincidents	
bigint	
1	395548

En canvi, si realitzem la cerca per persones de gènere femení el nombre és molt menor.

Queri 7

Codi

```
SELECT c.gender AS gènere, CAST((COUNT(i.id_infraccio)*100)AS FLOAT) / CAST((SELECT COUNT(i.id_infraccio) FROM Infraccio AS i)AS FLOAT)
AS "incidents_percentatge" FROM Infraccio AS i, Conductor AS c
WHERE c.id_driver = i.id_driver
GROUP BY c.gender
```

Resultats

	gènere character (3)	incidents_percentatge double precision
1	U	0.117220061854067
2	F	33.0065608118785
3	M	66.8762191262674

Queri 8

Codi

```
SELECT i.id_driver, p.nom, 24-COUNT(i.alcohol=true)-(COUNT(i.belts=true)) AS "Punts Restants"
FROM Conductor AS c, Propietari AS p, Infraccio AS i
WHERE c.id_driver = p.id_driver AND i.id_driver = c.id_driver AND (i.alcohol= true OR i.belts=true)
GROUP BY i.id_driver,p.nom
ORDER BY "Punts Restants" ASC ;
```

Resultats

id_driver bigint	nom character varying (255)	Punts Restants bigint
16100346	Ike Bowers	-30
30772441	Claire Conquer	-30
53983955	Evangelina Carville	-26
23464380	Ellyn Luscott	-24
18147962	Artie Bernt	-14
61871896	Wayne Risely	-12
20651640	Hoebart Josefowicz	-10
55948843	Verina Schimek	-10
86218370	Jany Statham	-10
76574319	Doe Godsai	-10
6013897	Moritz Harrower	-6
8994973	Frederich McKinna	-6
44663568	Darrelle Weafer	-6
7281146	Daisie Oehme	-6

Captures de pantalla

407	
408	SELECT i.id_driver, COUNT(i.alcohol=true) AS "Alcol",COUNT(i.belts=true) AS "Cinturo"
409	FROM Conductor AS c, Infraccio AS i
410	WHERE i.id_driver = c.id_driver AND i.id_driver = '16100346'
411	GROUP BY i.id_driver;
412	
413	
414	

Data Output	Explain	History	Messages
id_driver bigint	Alcol bigint	Cinturo bigint	
1	16100346	27	27

Amb aquesta queri demostrem que els punts son correctes ja que, fixant-nos en el primer conductor de la llista, que té -30 punts, veiem que ha tingut 27 incidents amb alcohol i 27 incidents amb el cinturó, que sumen un total de 54 incidents que si els restem als 24 punts inicials dels conductor ens donen els -30 punts restants que tenim a la queri.

Qeri 9

Codi

```
SELECT p.id_driver, p.nom, COUNT(*) AS "Num cotxes" FROM Propietari AS p, Vehicle AS v
WHERE v.id_prop = p.id_driver
GROUP BY p.id_driver
ORDER BY "Num cotxes" DESC LIMIT 1;
```

Resultats

Data Output	Explain	Messages	Query History
id_driver bigint	nom character varying (255)	Num cotxes bigint	
1	7666417 Maribelle Brockherst	6	

Captures de pantalla

445

446

447

448

449

```
SELECT p.id_driver, p.nom, v.matricula, v.model, v.color FROM Propietari AS p, Vehicle AS v
WHERE v.id_prop = p.id_driver AND p.id_driver = '7666417'
```

Data Output	Explain	Messages	Query History		
id_driver bigint	nom character varying (255)	matricula character varying (255)	model character varying (255)	color character varying (255)	
1	7666417	Maribelle Brockherst	DC-106755-CB	4S	BLACK
2	7666417	Maribelle Brockherst	DC-97555-AG	2D	GREEN
3	7666417	Maribelle Brockherst	MD-106755-CB	4D	BLACK
4	7666417	Maribelle Brockherst	MD-108045-CB	AVEO	BLUE
5	7666417	Maribelle Brockherst	MD-108845-AG	SUV	GRAY
6	7666417	Maribelle Brockherst	MD-117754-TB	4S	BLACK

Amb aquesta captura podem veure que tot i que no es el que sortia a les solucions, es coherent.

Queri 10

Codi

```
SELECT p.id_driver AS Identificador, p.nom, v.matricula, v.make AS Marca, v.model, v.year FROM Propietari AS p, Vehicle AS v
WHERE v.id_prop = p.id_driver AND v.color='BLACK'
ORDER BY v.year ASC LIMIT 4;
```

Resultats

	identificador bigint	nom character varying (255)	matricula character varying (255)	marca character varying (255)	model character varying (255)	year integer
1	25137178	Elladine Dwelly	VA-7255-HB	HONDA	CIVIC	1900
2	20205890	Thane Gligorijevic	MD-69254-FB	FORD	COBRA	1964
3	8544519	Gaylene Wilsone	MD-71954-GB	GENE	TL	1964
4	18035654	Babb Liptrot	MD-83261-SB	SHELBY REPL	CN	1965

Conclusions

Alhora de realitzar la fase 1, tot hi que hem hagut de anar enrederint la realització de la pràctica a causa de que havien varies conceptes que encara no havien sigut explicats a classe, hem aconseguit anar aprenent sense gaire dificultat com realitzar cada part de la pràctica.

Ens ha sigut de molta utilitat haver acudit i fet tots els laboratoris, ja que cada sessió la podríem extrapolar a diferents parts de la pràctica, alhora que ens servien d'exemple a seguir en el cas de que tinguéssim algun problema.

On hem tingut més problemes, va ser alhora de començar la pràctica, ja que no aconseguíem relacionar totes les diferents entitats fins que vam veure que era necessari crear una entitat Infracció que les relacionés totes. Un cop vam tenir el model conceptual ja vam poder avançar al model lògic i físic.

El segon problema més important a sigut quan ens va caldre ajuntar el codi d'importació amb el model físic, ja que no havíem realitzat abans mai res similar. En aquest moment va ser quan vam adonar-nos de les moltes incoherències que tenia el nostre model físic alhora de voler importar les diferents informacions dels fitxers, per tant vam tenir que reestructurar una part important tant del codi, com del model conceptual i lògic, per corregir els errors que ens frenaven d'aconseguir el correcte funcionament de la pràctica.

Posteriorment realitzant el estudi dels diferents sistemes gestors de bases de dades, ens hem adonat de les moltes solucions que hi ha per un mateix propòsit, i que és molt important saber quins són els punts forts i els punts dèbils de cada sistema per saber quin és el idoni per cada situació.

En el cas de la fase 2, hem tingut que realitzar moltes investigacions sobre quina era la millor manera d'obtenir les informacions requerides. Ha sigut interessant veure com, alhora de agafar les informacions, ens anàvem donant compte de quina manera podríem haver estructurat millor la nostra bbdd per realitzar les quèries més fàcilment. Ens ha enrederit bastant el fet de que al no tenir la bbdd del tot correcta, ens ha provocat que en alguna queri en particular no tinguéssim els mateixos resultats que els del enunciat, i hem pensat que havíem fet malament la queri, fins que hem caigut que el problema era de la bbdd, i que la queri era correcta.

En general, ens ha servit per acabar de entendre el funcionament de les queris i la importància que tenen en els SGBD, per aconseguir la informació exacta.