

```

tazio=> BEGIN;
BEGIN
tazio=> CREATE TABLE categorie(
tazio(> idcat INT PRIMARY KEY,
tazio(> agemini INT,
tazio(> intitule VARCHAR(50) );
CREATE TABLE
tazio=> SAVEPOINT tuplecat;
SAVEPOINT
tazio=> INSERT INTO categorie VALUES (01, 12, 'première catégorie');
INSERT 0 1
tazio=> INSERT INTO categorie VALUES (02, 18, 'deuxième catégorie');
INSERT 0 1

```

```

tazio=> SELECT * FROM categorie ;
 idcat | agemini | intitule
-----+-----+-----
      1 |      12 | première catégorie
      2 |      18 | deuxième catégorie
(2 rows)

```

```

tazio=> ROLLBACK
PREPARED          TO SAVEPOINT TRANSACTION WORK
tazio=> ROLLBACK WORK TO SAVEPOINT tuplecat;
ROLLBACK
tazio=> SELECT * FROM categorie ;
 idcat | agemini | intitule
-----+-----+-----
(0 rows)
tazio=> COMMIT;
COMMIT

```

```

tazio=> SELECT CONCAT(EXTRACT(HOUR FROM heuredbt), '-', EXTRACT(MINUTE FROM heuredbt)) AS Debut, CONCAT(EXTRACT(HOUR FROM heurefin), '-', EXTRACT(MINUTE FROM heurefin)) AS Fin, EXTRACT(MINUTE FROM heurefin - heuredbt) + (EXTRACT(HOUR FROM heurefin - heuredbt)*60) AS DureeMn FROM seance;

```

```

debut | fin | dureemn
-----+-----+-----
14-0 | 15-50 | 110
16-0 | 17-50 | 110
18-0 | 19-50 | 110
20-0 | 21-50 | 110
22-0 | 23-50 | 110
14-0 | 15-50 | 110
16-0 | 17-50 | 110
18-0 | 19-50 | 110
20-0 | 21-50 | 110
22-0 | 23-50 | 110
14-0 | 15-50 | 110
16-0 | 17-50 | 110
18-0 | 19-50 | 110
20-0 | 21-50 | 110
22-0 | 23-50 | 110
14-0 | 15-0 | 60
16-0 | 17-0 | 60
18-0 | 19-0 | 60
20-0 | 21-0 | 60
22-0 | 23-0 | 60
22-0 | 23-0 | 60
(21 rows)

```

```
tazio=> SELECT heuredbt FROM seance WHERE numsale = 1 AND cine = 1;
      heuredbt
-----
0001-01-01 14:00:00 BC
0001-01-01 16:00:00 BC
0001-01-01 18:00:00 BC
0001-01-01 20:00:00 BC
0001-01-01 22:00:00 BC
(5 rows)
```

```
tazio=> SELECT AVG(prix) FROM seance;
      avg
-----
7.8571428571428571
(1 row)
```

```
tazio=> SELECT personnage, COUNT(personnage) AS nb_apparition FROM casting
GROUP BY personnage;
      personnage | nb_apparition
-----+-----
Jack Torrance | 1
Little Bill Daggett | 1
Evelyn Cross Mulwray | 1
Det. Jimmy Popeye Doyle | 1
Simon Phoenix | 1
Lt. Web Smith | 2
Ned Logan | 1
Blade/Eric Brooks | 1
John Spartan | 1
William Bill Munny | 1
Jake J.J. Gittes | 1
Lt. Lenina Huxley | 1
Capt. John Connor | 1
Det. Buddy Cloudy Russo | 1
(14 rows)
```

```
tazio=> SELECT personnage, COUNT(personnage) AS nb_apparition FROM casting
GROUP BY personnage HAVING COUNT(personnage) >= 2;
      personnage | nb_apparition
-----+-----
Lt. Web Smith | 2
(1 row)
```

```
tazio=> SELECT prenom, COUNT(prenom) FROM acteur GROUP BY prenom;
      prenom | count
-----+-----
Roy | 1
Sean | 1
Sandra | 1
Wesley | 1
Faye | 1
Harvey | 1
Gene | 1
Silvester | 1
Morgan | 1
Clint | 1
Jack | 1
(11 rows)
```

```
tazio=> SELECT MAX(heurefin) FROM seance ;
          max
-----
0001-01-01 23:50:00 BC
(1 row)
```

```
tazio=> SELECT heuredbt, heurefin FROM seance WHERE heuredbt = (SELECT MIN(
heuredbt) FROM seance);
          heuredbt |          heurefin
-----+-----
0001-01-01 14:00:00 BC | 0001-01-01 15:50:00 BC
0001-01-01 14:00:00 BC | 0001-01-01 15:50:00 BC
0001-01-01 14:00:00 BC | 0001-01-01 15:50:00 BC
0001-01-01 14:00:00 BC | 0001-01-01 15:50:00 BC
(4 rows)
```

```
tazio=> SELECT idseance, heuredbt, heurefin FROM seance WHERE film = (SELEC
T idfilm FROM film WHERE titre = 'Impitoyable');
 idseance |          heuredbt |          heurefin
-----+-----+-----
      11 | 0001-01-01 14:00:00 BC | 0001-01-01 15:50:00 BC
      12 | 0001-01-01 16:00:00 BC | 0001-01-01 17:50:00 BC
      13 | 0001-01-01 18:00:00 BC | 0001-01-01 19:50:00 BC
      14 | 0001-01-01 20:00:00 BC | 0001-01-01 21:50:00 BC
      15 | 0001-01-01 22:00:00 BC | 0001-01-01 23:50:00 BC
      16 | 0001-01-01 14:00:00 BC | 0001-01-01 15:50:00 BC
      17 | 0001-01-01 16:00:00 BC | 0001-01-01 17:50:00 BC
      18 | 0001-01-01 18:00:00 BC | 0001-01-01 19:50:00 BC
      19 | 0001-01-01 20:00:00 BC | 0001-01-01 21:50:00 BC
      20 | 0001-01-01 22:00:00 BC | 0001-01-01 23:50:00 BC
(10 rows)
```

```
tazio=> SELECT DISTINCT titre FROM film, seance WHERE film.idfilm = seance.
film;
          titre
-----
Impitoyable
French Connection
Chinatown
(3 rows)
```

```
tazio=> SELECT DISTINCT titre, heuredbt, heurefin FROM film, seance WHERE f
ilm.idfilm = seance.film ORDER BY titre;
          titre |          heuredbt |          heurefin
-----+-----+-----
Chinatown | 0001-01-01 14:00:00 BC | 0001-01-01 15:50:00 BC
Chinatown | 0001-01-01 16:00:00 BC | 0001-01-01 17:50:00 BC
Chinatown | 0001-01-01 18:00:00 BC | 0001-01-01 19:50:00 BC
Chinatown | 0001-01-01 20:00:00 BC | 0001-01-01 21:50:00 BC
Chinatown | 0001-01-01 22:00:00 BC | 0001-01-01 23:50:00 BC
French Connection | 0001-01-01 22:00:00 BC | 0001-01-01 23:50:00 BC
Impitoyable | 0001-01-01 14:00:00 BC | 0001-01-01 15:50:00 BC
Impitoyable | 0001-01-01 16:00:00 BC | 0001-01-01 17:50:00 BC
Impitoyable | 0001-01-01 18:00:00 BC | 0001-01-01 19:50:00 BC
Impitoyable | 0001-01-01 20:00:00 BC | 0001-01-01 21:50:00 BC
Impitoyable | 0001-01-01 22:00:00 BC | 0001-01-01 23:50:00 BC
(11 rows)
```

```
tazio=> SELECT DISTINCT titre FROM film, seance WHERE film.idfilm = seance.
film ORDER BY titre;
      titre
-----
Chinatown
French Connection
Impitoyable
(3 rows)
```

```
tazio=> SELECT titre FROM film EXCEPT SELECT DISTINCT titre FROM film, seance
WHERE film.idfilm = seance.film ORDER BY titre;
      titre
-----
Blade
Demolition man
Rising Sun
The Shining
(4 rows)
```

```
tazio=> SELECT DISTINCT cinema.nom, film.titre, seance.heuredbt FROM cinema
, film, seance WHERE cinema.idcine = seance.cine AND film.idfilm = seance.film;
```

nom	titre	heuredbt
UGC Ciné Cité	Chinatown	0001-01-01 16:00:00 BC
UGC Ciné Cité	Chinatown	0001-01-01 22:00:00 BC
UGC Ciné Cité	Chinatown	0001-01-01 14:00:00 BC
UGC Ciné Cité	Chinatown	0001-01-01 20:00:00 BC
UGC Ciné Cité	Impitoyable	0001-01-01 18:00:00 BC
Pathé Brumath	Chinatown	0001-01-01 20:00:00 BC
Pathé Brumath	Impitoyable	0001-01-01 18:00:00 BC
Pathé Brumath	Chinatown	0001-01-01 16:00:00 BC
Pathé Brumath	Chinatown	0001-01-01 14:00:00 BC
Pathé Brumath	Chinatown	0001-01-01 22:00:00 BC
Pathé Brumath	Impitoyable	0001-01-01 14:00:00 BC
Pathé Brumath	Impitoyable	0001-01-01 22:00:00 BC
Le Star	French Connection	0001-01-01 22:00:00 BC
Pathé Brumath	Impitoyable	0001-01-01 16:00:00 BC
Pathé Brumath	Chinatown	0001-01-01 18:00:00 BC
Pathé Brumath	Impitoyable	0001-01-01 20:00:00 BC
UGC Ciné Cité	Chinatown	0001-01-01 18:00:00 BC
UGC Ciné Cité	Impitoyable	0001-01-01 20:00:00 BC
UGC Ciné Cité	Impitoyable	0001-01-01 22:00:00 BC
UGC Ciné Cité	Impitoyable	0001-01-01 14:00:00 BC
UGC Ciné Cité	Impitoyable	0001-01-01 16:00:00 BC

(21 rows)

```
tazio=> SELECT nom, prenom FROM acteur WHERE prenom IN (SELECT prenom FROM
acteur GROUP BY prenom HAVING COUNT(prenom) >= 2);
 nom | prenom
-----+-----
(0 rows)
```

```
tazio=> SELECT cinema.nom, seance.heuredbt, film.titre FROM cinema, seance, film WHERE cinema.idcine = seance.cine AND film.idfilm = seance.film;
```

nom	heuredbt	titre
UGC Ciné Cité	0001-01-01 14:00:00 BC	Chinatown
UGC Ciné Cité	0001-01-01 16:00:00 BC	Chinatown
UGC Ciné Cité	0001-01-01 18:00:00 BC	Chinatown
UGC Ciné Cité	0001-01-01 20:00:00 BC	Chinatown
UGC Ciné Cité	0001-01-01 22:00:00 BC	Chinatown
Pathé Brumath	0001-01-01 14:00:00 BC	Chinatown
Pathé Brumath	0001-01-01 16:00:00 BC	Chinatown
Pathé Brumath	0001-01-01 18:00:00 BC	Chinatown
Pathé Brumath	0001-01-01 20:00:00 BC	Chinatown
Pathé Brumath	0001-01-01 22:00:00 BC	Chinatown
UGC Ciné Cité	0001-01-01 14:00:00 BC	Impitoyable
UGC Ciné Cité	0001-01-01 16:00:00 BC	Impitoyable
UGC Ciné Cité	0001-01-01 18:00:00 BC	Impitoyable
UGC Ciné Cité	0001-01-01 20:00:00 BC	Impitoyable
UGC Ciné Cité	0001-01-01 22:00:00 BC	Impitoyable
Pathé Brumath	0001-01-01 14:00:00 BC	Impitoyable
Pathé Brumath	0001-01-01 16:00:00 BC	Impitoyable
Pathé Brumath	0001-01-01 18:00:00 BC	Impitoyable
Pathé Brumath	0001-01-01 20:00:00 BC	Impitoyable
Pathé Brumath	0001-01-01 22:00:00 BC	Impitoyable
Le Star	0001-01-01 22:00:00 BC	French Connection

(21 rows)

```
tazio=> SELECT cinema.nom, TO_CHAR(seance.heuredbt, 'HH24:MI') AS debut, TO_CHAR(seance.heurefin, 'HH24:MI') AS fin FROM cinema, seance, film WHERE cinema.idcine = seance.cine AND film.idfilm = seance.film AND LOWER(film.titre) = 'impitoyable' ORDER BY debut;
```

nom	debut	fin
UGC Ciné Cité	14:00	15:50
Pathé Brumath	14:00	15:50
UGC Ciné Cité	16:00	17:50
Pathé Brumath	16:00	17:50
UGC Ciné Cité	18:00	19:50
Pathé Brumath	18:00	19:50
Pathé Brumath	20:00	21:50
UGC Ciné Cité	20:00	21:50
UGC Ciné Cité	22:00	23:50
Pathé Brumath	22:00	23:50

(10 rows)

```
tazio=> SELECT DISTINCT film.titre, DATE_PART('hour', heurefin)*60 + DATE_PART('minute', heurefin) - DATE_PART('hour', heuredbt)*60 - DATE_PART('minute', heuredbt) AS dureemn FROM film, seance WHERE film.idfilm = seance.film AND DATE_PART('hour', heurefin)*60 + DATE_PART('minute', heurefin) - DATE_PART('hour', heuredbt)*60 - DATE_PART('minute', heuredbt) < 120;
```

titre	dureemn
Chinatown	110
French Connection	110
Impitoyable	110

(3 rows)

```
tazio=> SELECT nom, prenom, titre FROM acteur, film, casting WHERE acteur.
idacteur = casting.idacteur AND film.idfilm = casting.idfilm;
```

nom	prenom	titre
Nicholson	Jack	Chinatown
Nicholson	Jack	The Shining
Dunaway	Faye	Chinatown
Snipes	Wesley	Blade
Snipes	Wesley	Demolition man
Stallone	Silvester	Demolition man
Bullock	Sandra	Demolition man
Snipes	Wesley	Rising Sun
Connery	Sean	Rising Sun
Keitel	Harvey	Rising Sun
Eastwood	Clint	Impitoyable
Hackman	Gene	Impitoyable
Freeman	Morgan	Impitoyable
Hackman	Gene	French Connection
Scheider	Roy	French Connection

(15 rows)

```
tazio=> ALTER TABLE seance ADD CHECK(numsalle > 0 AND prix > 0);
ALTER TABLE
```

```
tazio=> ALTER TABLE film ADD duree INTEGER;
ALTER TABLE
```

```
tazio=> UPDATE film SET duree = DATE_PART('hour', seance.heurefin)*60 + DA
TE_PART('minute', seance.heurefin) - DATE_PART('hour', seance.heuredbt)*60
- DATE_PART('minute', seance.heuredbt) FROM seance WHERE film.idfilm = se
ance.film;
```

```
UPDATE 3
```

```
tazio=> SELECT * FROM film;
```

idfilm	titre	realisateur	datesortie	duree
2	Blade	Stephen Norrington	1998-01-01	
3	Demolition man	Marco Brambilla	1993-01-01	
4	Rising Sun	Philip Kaufman	1993-01-01	
7	The Shining	Stanley Kubrick	1980-01-01	
1	Chinatown	Roman Polanski	1974-01-01	110
5	Impitoyable	Clint Eastwood	1992-01-01	110
6	French Connection	William Friedkin	1971-01-01	110

(7 rows)