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Abstract

The following database proposal aims to allow BPD to quickly see and identify all related case information regarding the criminal or any other party as well as the evidence and the judgement.

Database Proposal

Boston Police Department

On January 21st, we have been contacted by Boston Police Department to propose a new database system. During our meeting, our client came up with the following need:

“We are looking for a database to share between our offices that regroup all the information regarding all the criminals. We struggle to find related crimes and criminals. We also often confuse if they have been convicted or not and what are the attribute penalties per judgement. Also, It is important for us to identify who is in prison and where. Often, we send criminals to prison that are close to be full. Because we are working with administration, we sometimes have no idea which case is open or not, who are the people in charge, what are the penalties and if the crime has been resolve or not. For public safety we also need to identify which crime is related to which case as it allows us to faster identify if there are any relationship between the cases. Finally, we need to be able to quickly identify who are the witnesses so we can either ask more question or protect them. “

Accordingly, we came up with the following proposed reports:

1. List of all the criminals, the number of crimes they are suspects and the number of crime they have been judge guilty.
2. List of people currently in prison and there related penalty ending date
3. List of people who have an ongoing penalty.
4. List of Judgement type, penalty received, and the type of crime committed.
5. List of prison with criminals, count of prisoners, maximum capacity, their occupancy rate and average age of prisoners
6. List of case with “Unknown” Criminal cases, including the related crime details and evidences
7. Number of committed crimes per cases
8. Cases currently open and the number of related crimes and criminals
9. List of Cases including their name and the related witness
10. Cases list with administrative information judge and officer name, instance, opening , closing case date and duration

And the following procedures:

1. Person details and number of crimes for a specific person (output)
2. The level of offense of a crime (output)
3. The criminal record of a person

Based on the conversation with our client we identified the following information.

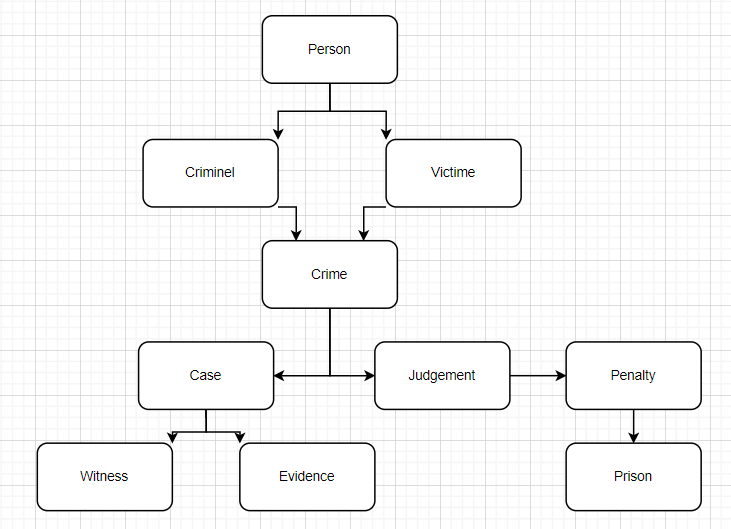
* A case has a name, an officer in charge, an opening and closing dated and it might have more than 1 crime related to it.
* Each crime has a type, a date, a victim, a criminal and one or more judgement.
* Each evidence has a type, collected date, description and it is related to a case
* A judgement also has a designated judge, decision and also a type and a date
* Depending on the decision, more than one penalty might be assigned; Example: prison + fine.

Some of the constraint that our client mentioned were:

* A need to avoid duplicated information about people details.
* It is important to allow all the crimes to appear when searching for a specific case.
* A register needs to be created for Criminal/Victim and Witness

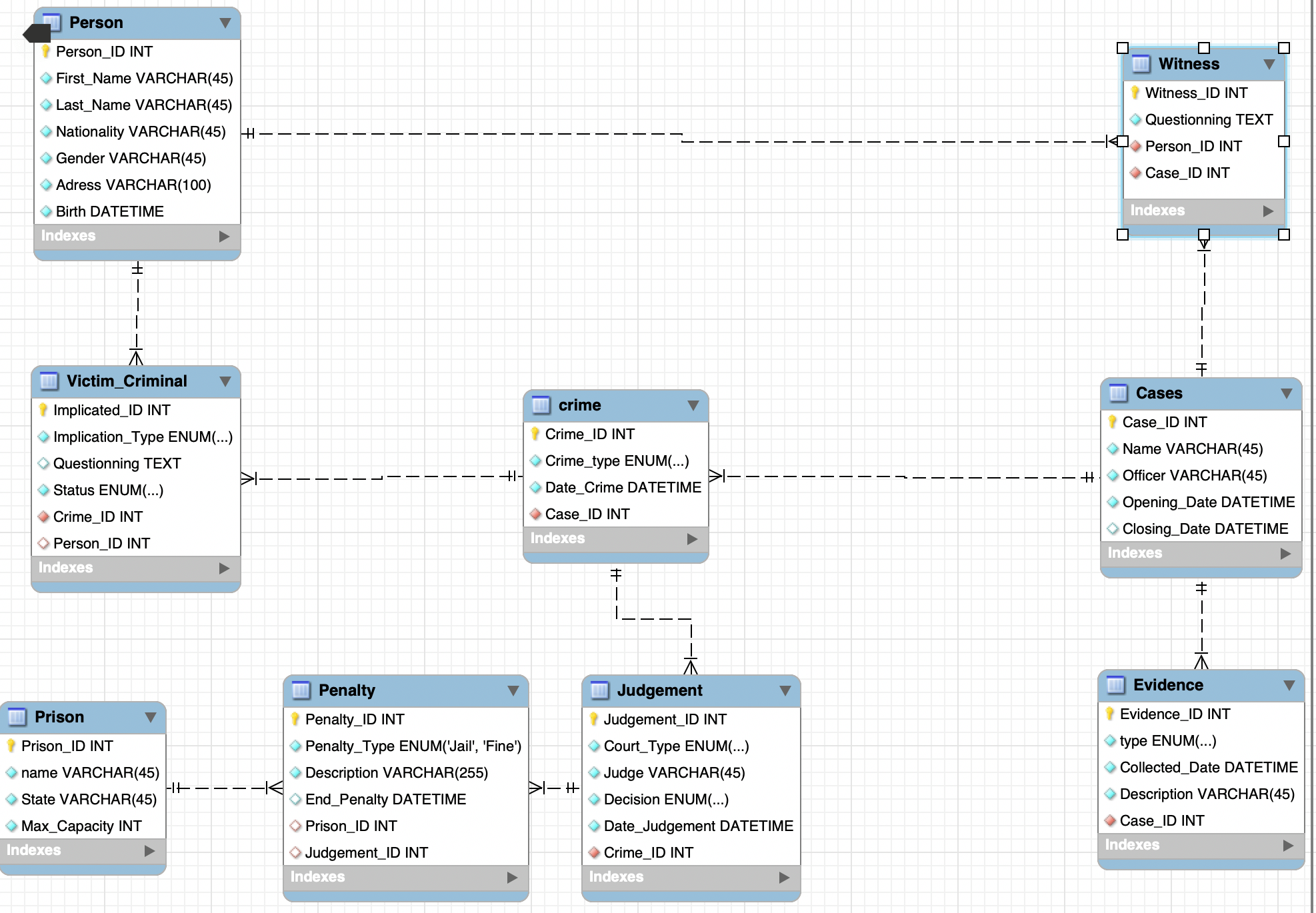
# Database Structure

Considering the above-mentioned needs and limits, we came up with the following Data Structure:



# Entity-Relational (ER) Model

According to our Data Structure and the data flow, we came up with the following ER Model.



# Reports

Based on the developed ER, we created the following reports:

## List of all the criminals, the number of crimes they are suspects and the number of crime they have been judge guilty.

Code:

Select

P.person\_ID,

P.first\_name 'First Name',

P.last\_name 'Last Name',

count(VC.implicated\_ID) 'Suspected Nbr Committed crime',

count(PEN.Penalty\_ID) 'comited crim'

from person P

left join victim\_criminal VC on P.person\_id=VC.person\_id

left join Crime CR on CR.Crime\_ID=VC.Crime\_ID

left join Judgement JU on JU.Crime\_ID = CR.Crime\_ID

left join Penalty PEN on PEN.Judgement\_ID = JU.Judgement\_ID

where VC.Implication\_Type="Criminal"

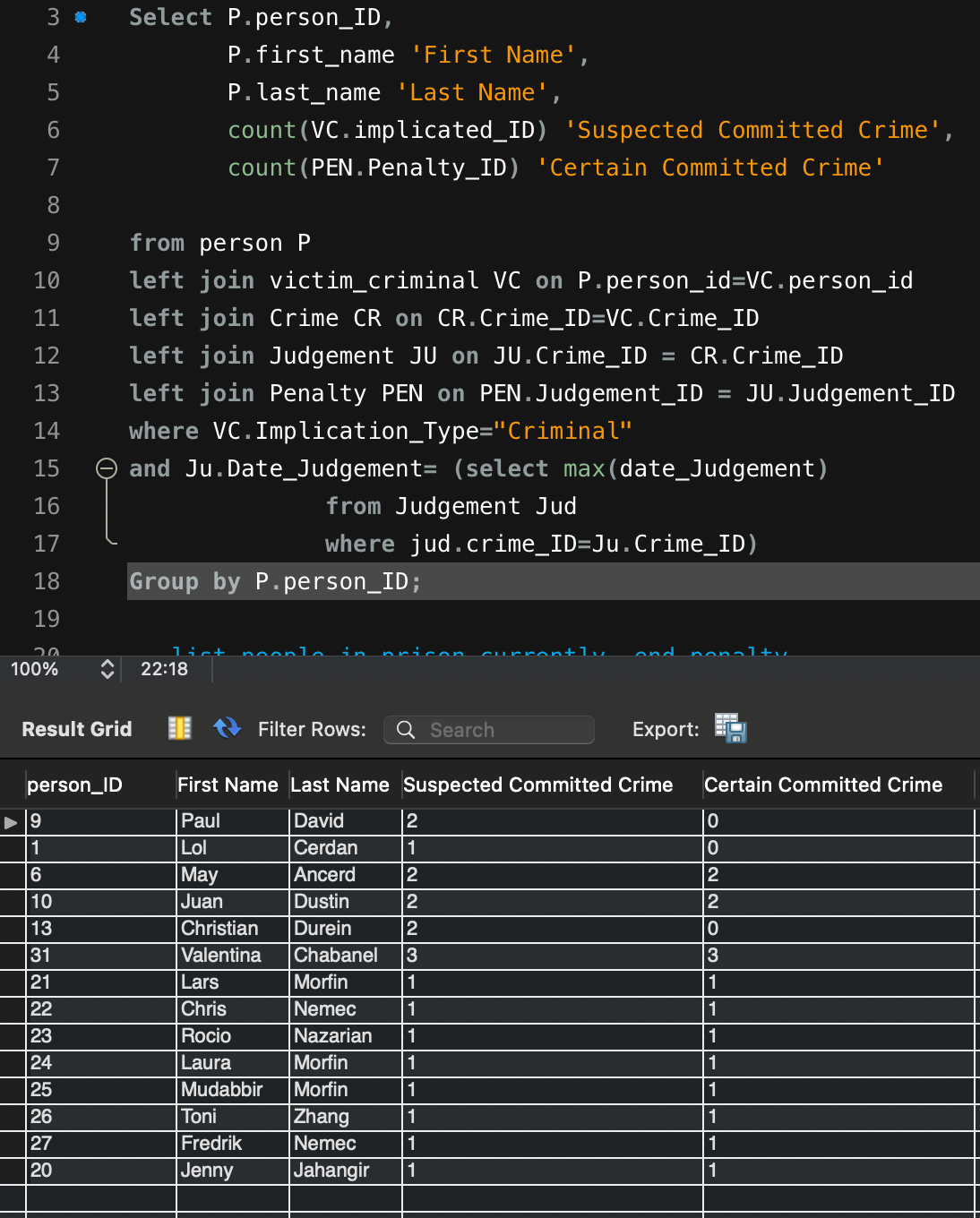
and Ju.Date= (select max(date)

from Judgement Jud

where jud.crime\_ID=Ju.Crime\_ID)

Group by P.person\_ID;

Results:



## List of people currently in prison and there related penalty ending date

Code:

Select

distinct(P.person\_ID),

P.first\_name 'First Name',

P.last\_name 'Last Name',

PR.name 'Prison Name',

End\_Penalty

from person P , victim\_criminal VC, Crime CR, Prison PR, Penalty PE, Judgement JU

Where P.person\_id=VC.person\_id

and VC.Implication\_Type="Criminal"

and CR.Crime\_ID=VC.Crime\_ID

and JU.Crime\_ID=CR.Crime\_ID

and PE.Judgement\_ID=JU.Judgement\_ID

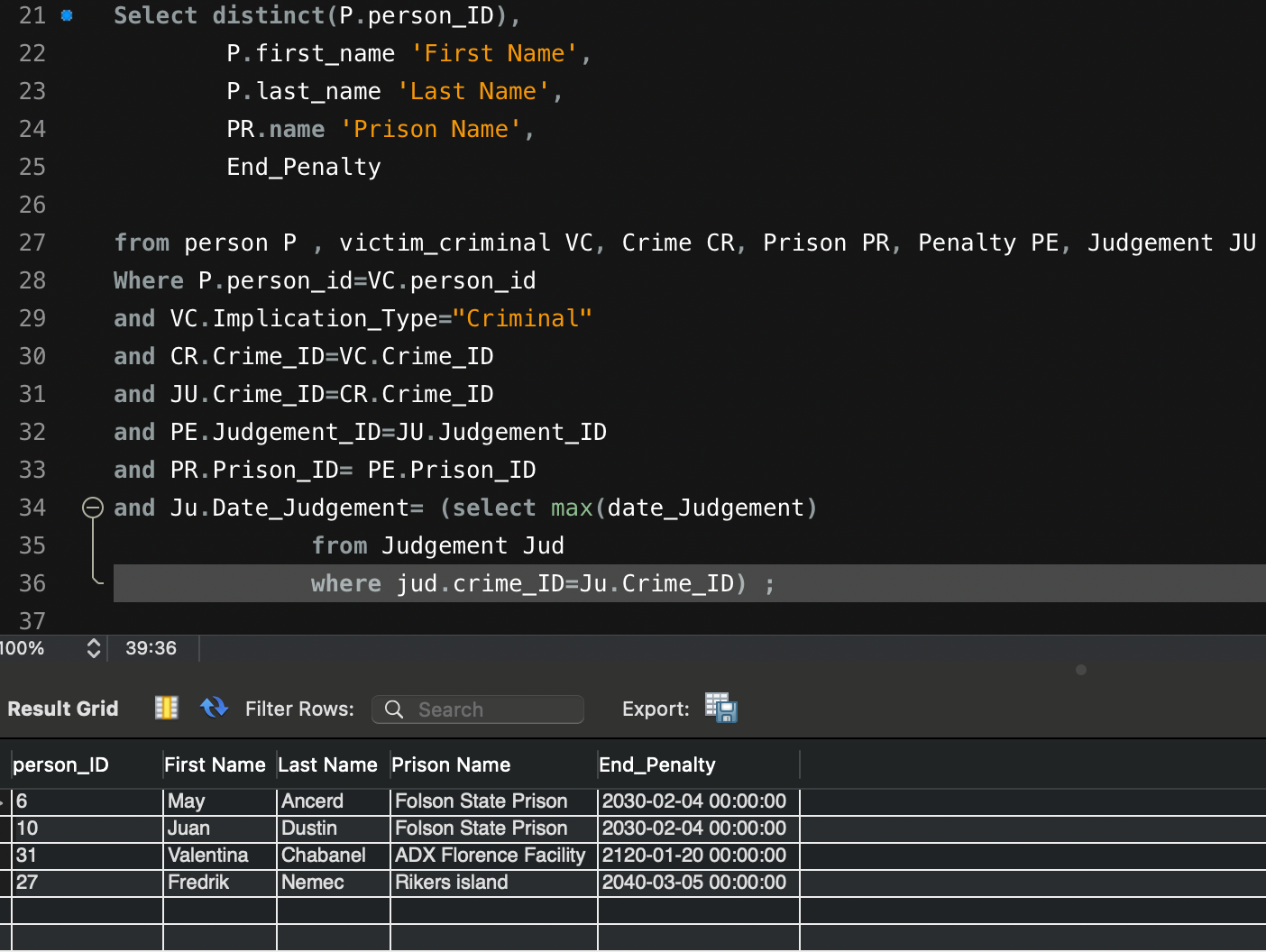
and PR.Prison\_ID= PE.Prison\_ID

and Ju.Date= (select max(date) ## Subquery to get only poeple currently

from Judgement Jud

where jud.crime\_ID=Ju.Crime\_ID) ;

Results



## List of people who have an ongoing penalty.

Code:

Select

distinct(P.person\_ID),

P.first\_name 'First Name',

P.last\_name 'Last Name',

PR.name 'Prison Name',

End\_Penalty

from person P , victim\_criminal VC, Crime CR, Prison PR, Penalty PE, Judgement JU

Where P.person\_id=VC.person\_id

and VC.Implication\_Type="Criminal"

and CR.Crime\_ID=VC.Crime\_ID

and JU.Crime\_ID=CR.Crime\_ID

and PE.Judgement\_ID=JU.Judgement\_ID

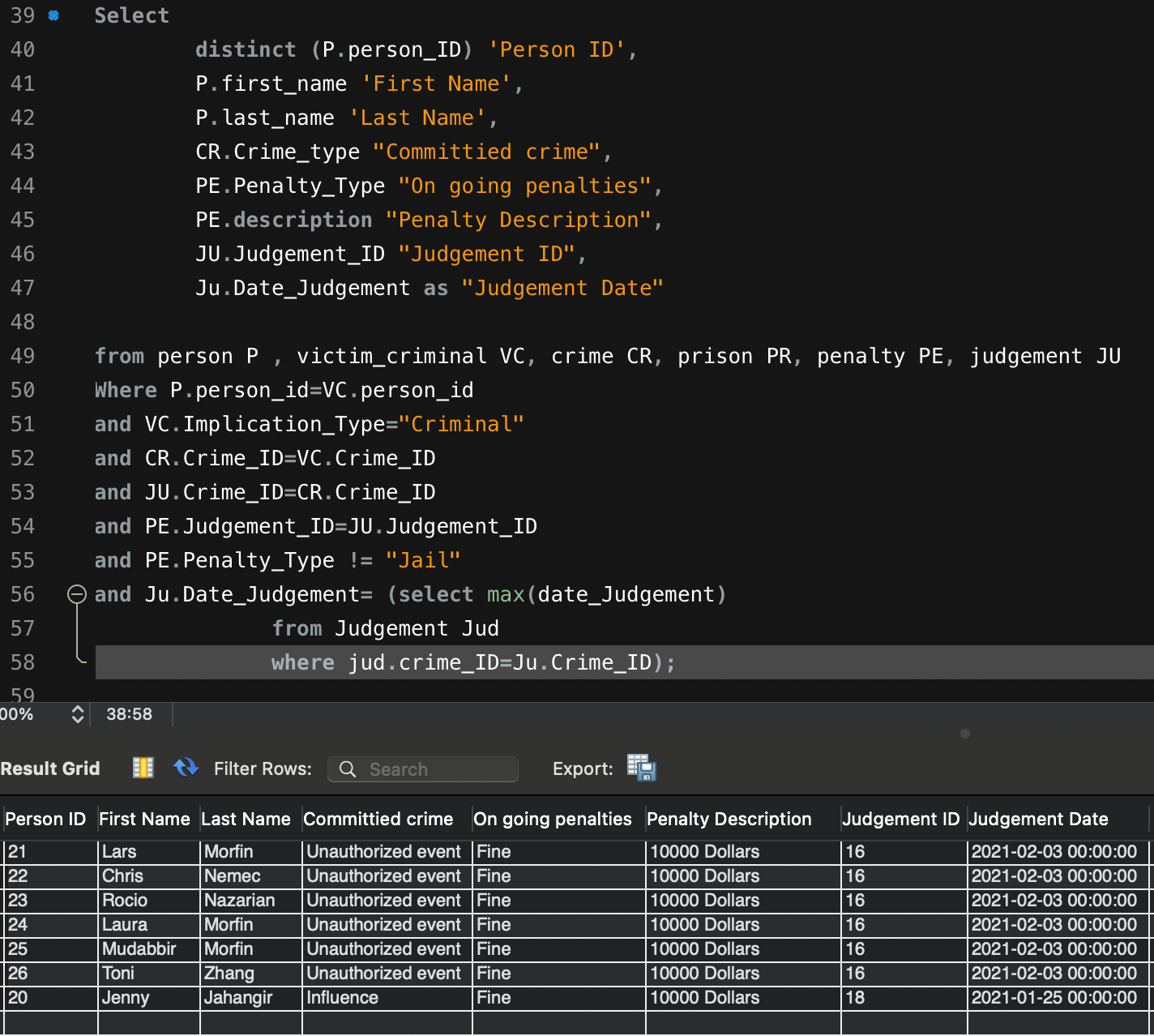
and PR.Prison\_ID= PE.Prison\_ID

and Ju.Date= (select max(date) ## Subquery to get only poeple currently

from Judgement Jud

where jud.crime\_ID=Ju.Crime\_ID) ;

Results:



## List of Judgement type, penalty received, and the type of crime committed.

Code:

Select CR.Crime\_ID,

CR.Crime\_type,

JU.Decision,

JU.Court\_type,

PE.Penalty\_Type

From Crime as CR, Judgement as JU , Victim\_Criminal as VC , penalty PE

where CR.crime\_ID=JU.Crime\_ID

and CR.Crime\_ID = VC.Crime\_ID

and PE.Judgement\_ID = JU.Judgement\_ID

and VC.Implication\_Type = 'Criminal'

and Ju.Date= (select max(date)

from Judgement Jud

where jud.crime\_ID=Ju.Crime\_ID);

Results:



## List of prison with criminals, count of prisoners, maximum capacity, their occupancy rate and average age of prisoners

Code:

select

PR.Prison\_ID,

PR.name ,

count(distinct(PER.Person\_ID)) as "number of person" ,

max\_capacity,

(count(distinct(PER.Person\_ID))/ max\_capacity) as "taux de remplissement",

AVG(TIMESTAMPDIFF(YEAR, PER.birth, CURDATE())) AS avg\_age

from prison PR

join penalty PEN on PR.prison\_ID = PEN.prison\_ID

join judgement JU on JU.judgement\_ID = PEN.judgement\_ID

join crime CR on CR.Crime\_id = JU.Crime\_ID

join victim\_criminal VC on VC.Crime\_ID = CR.Crime\_id

join person PER on PER.Person\_ID= VC.Person\_ID

where end\_penalty > date(now())

and Implication\_Type ='Criminal'

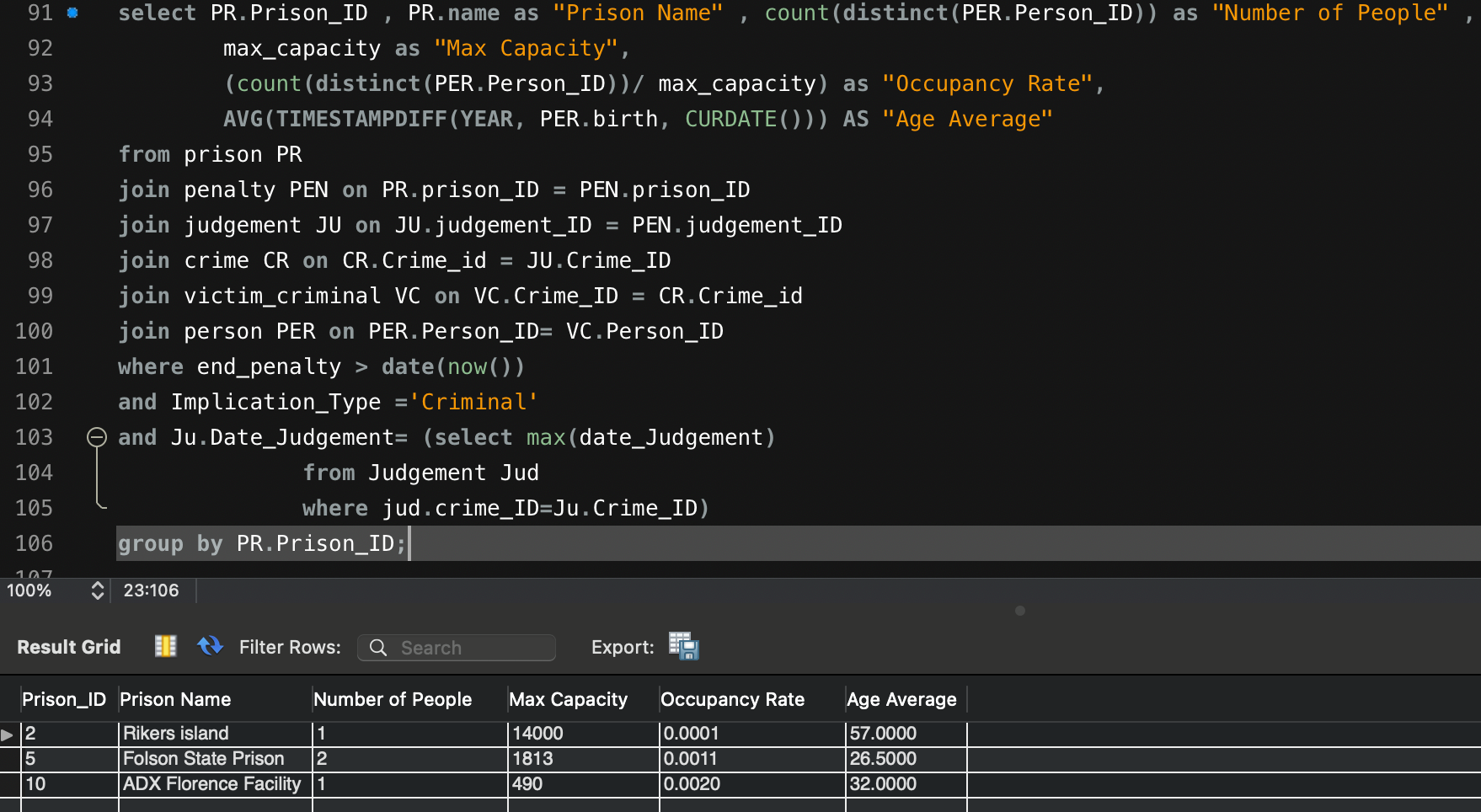
and Ju.Date= (select max(date)

from Judgement Jud

where jud.crime\_ID=Ju.Crime\_ID)

group by PR.Prison\_ID;

Results:



## List of case with “Unknown” Criminal cases, including the related crime details and evidences

Code:

select

distinct(CA.Case\_ID) ,

CR.Crime\_ID,

CA.Name ,

CR.Date\_Crime,

CR.Crime\_type , E.type , E.Description

from cases CA , crime CR , evidence E ,victim\_criminal VC

where CA.Case\_ID = CR.Case\_ID

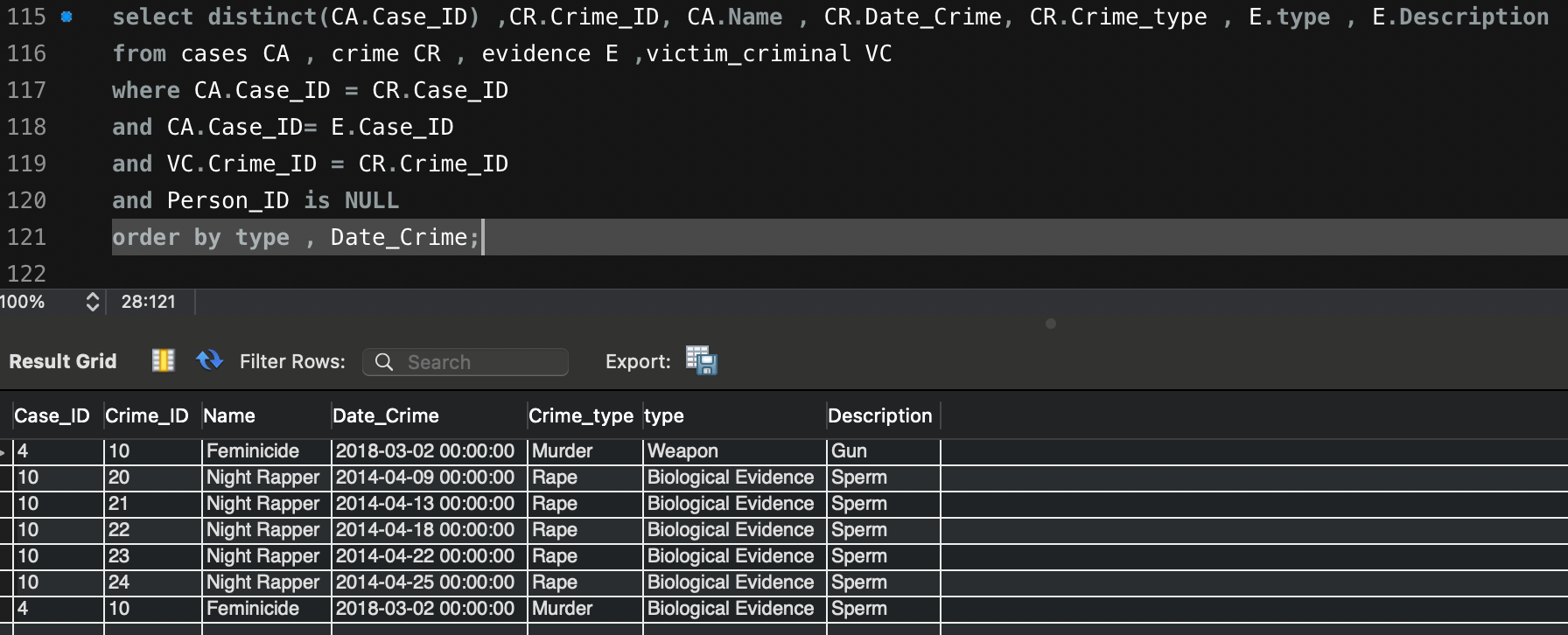
and CA.Case\_ID= E.Case\_ID

and VC.Crime\_ID = CR.Crime\_ID

and Person\_ID is NULL

order by type , Date\_Crime;

Results:



## Number of committed crimes per cases

Code:

select

CA.Case\_ID ,

CA.Name ,

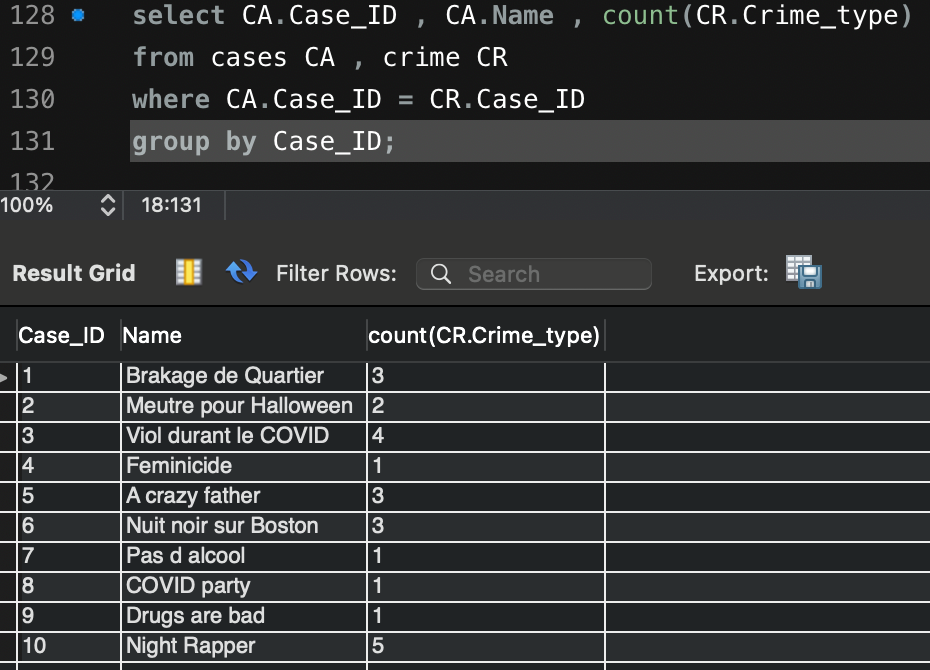
count(CR.Crime\_type)

from cases CA , crime CR

where CA.Case\_ID = CR.Case\_ID

group by Case\_ID;

Results:



## Cases currently open and the number of related crimes and criminals

Code:

select

CA.Case\_ID,

CA.Name ,

CA.Opening\_Date ,

count(CR.Crime\_type),

count(distinct(VC.Person\_ID)) as "NBR OF kNOWN CRIMINALS"

from cases CA , crime CR , Victim\_Criminal VC

where CA.Case\_ID = CR.Case\_ID

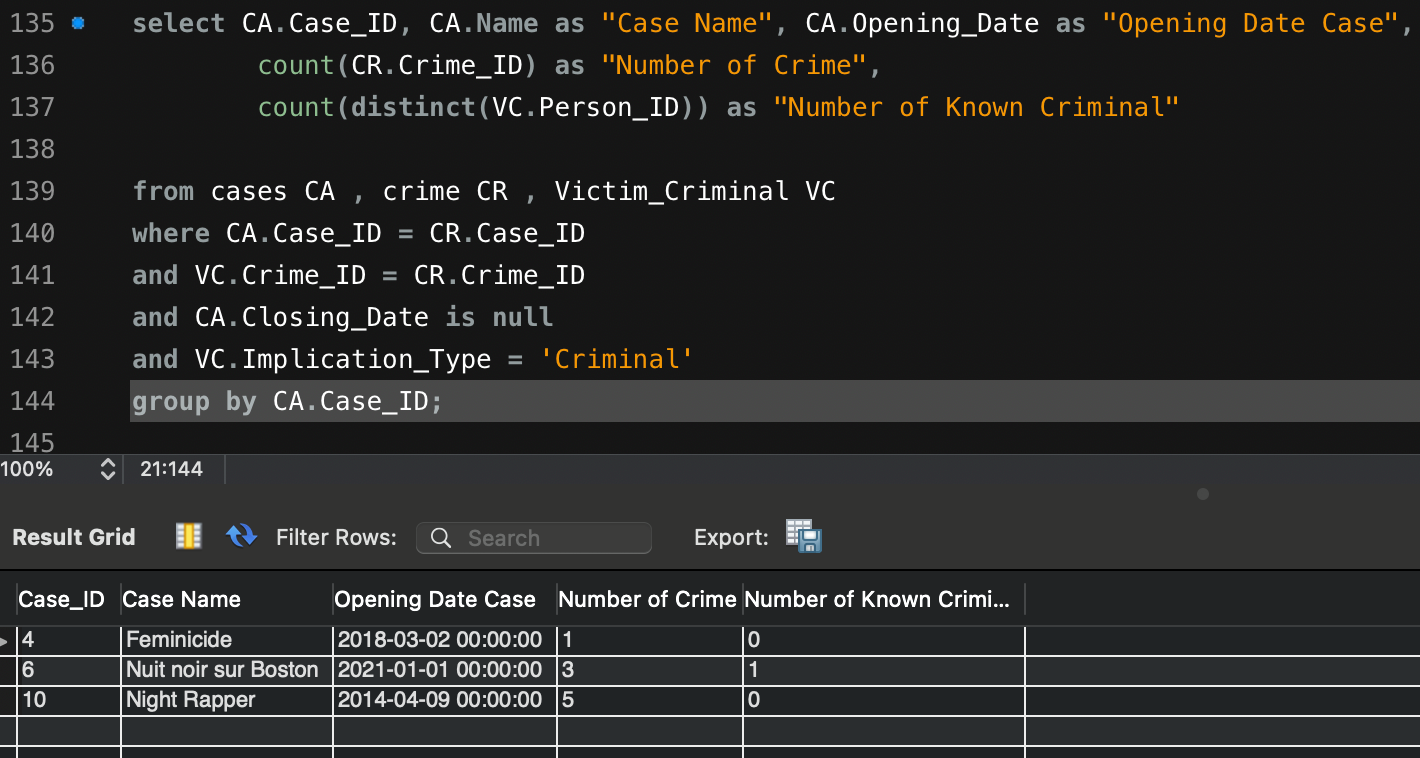
and VC.Crime\_ID = CR.Crime\_ID

and CA.Closing\_Date is null

and VC.Implication\_Type = 'Criminal'

group by CA.Case\_ID;

Results:



## List of Cases including their name and the related witness

Code:

select

CA.Case\_ID ,

CA.Name ,

W.witness\_ID ,

PER.First\_Name ,

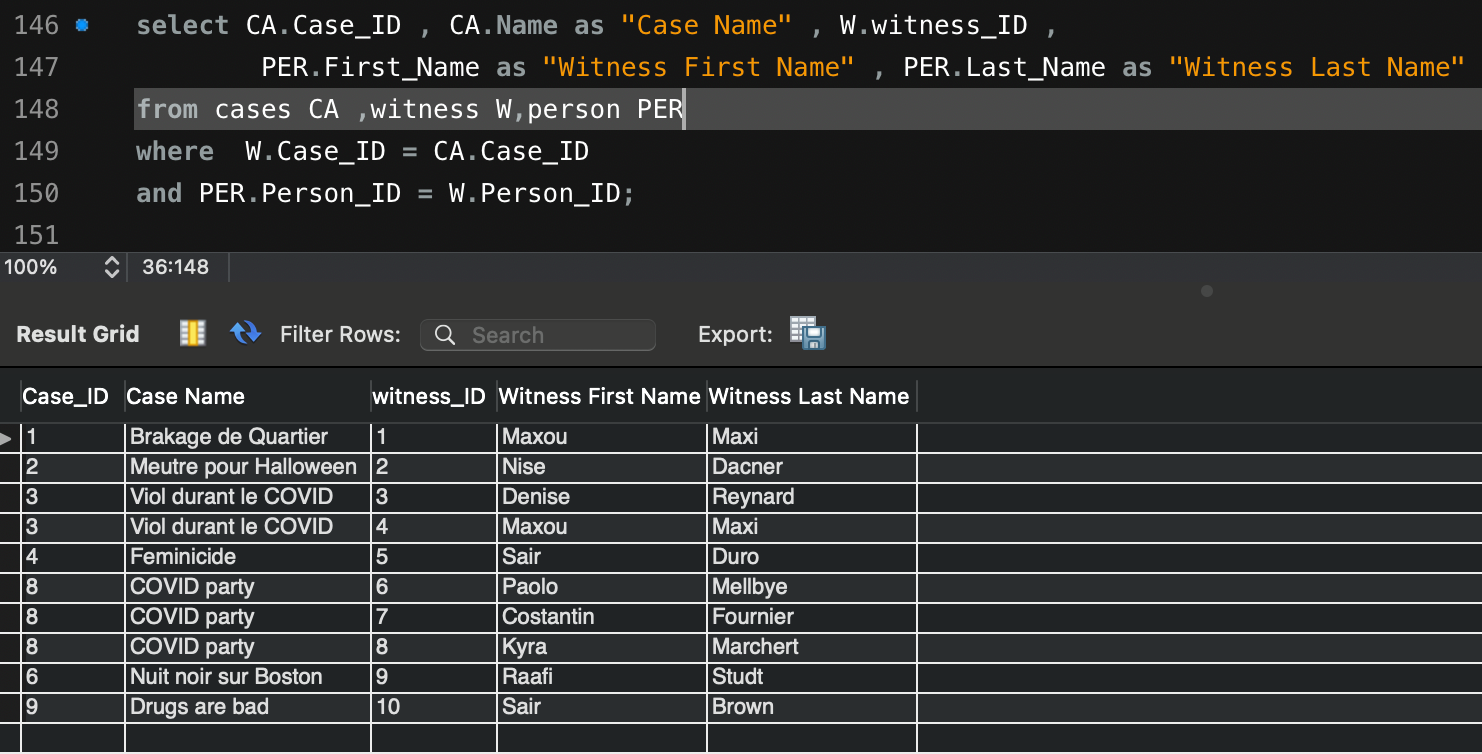
PER.Last\_Name

from cases CA ,witness W,person PER

where W.Case\_ID = CA.Case\_ID

and PER.Person\_ID = W.Person\_ID;

Results:



### Cases list with administrative information judge and officer name, instance, opening , closing case date and duration

Code:

select

CA.case\_ID,

CA.Name ,

CR.Crime\_ID,

JU.Judge ,

JU.Court\_Type ,

Opening\_Date as "Case date" ,

Date as "Judgement Date" ,

TIMESTAMPDIFF(YEAR, Opening\_Date, Date) as “Case Duration”

from cases CA

left join crime CR on CA.Case\_ID = CR.Case\_ID

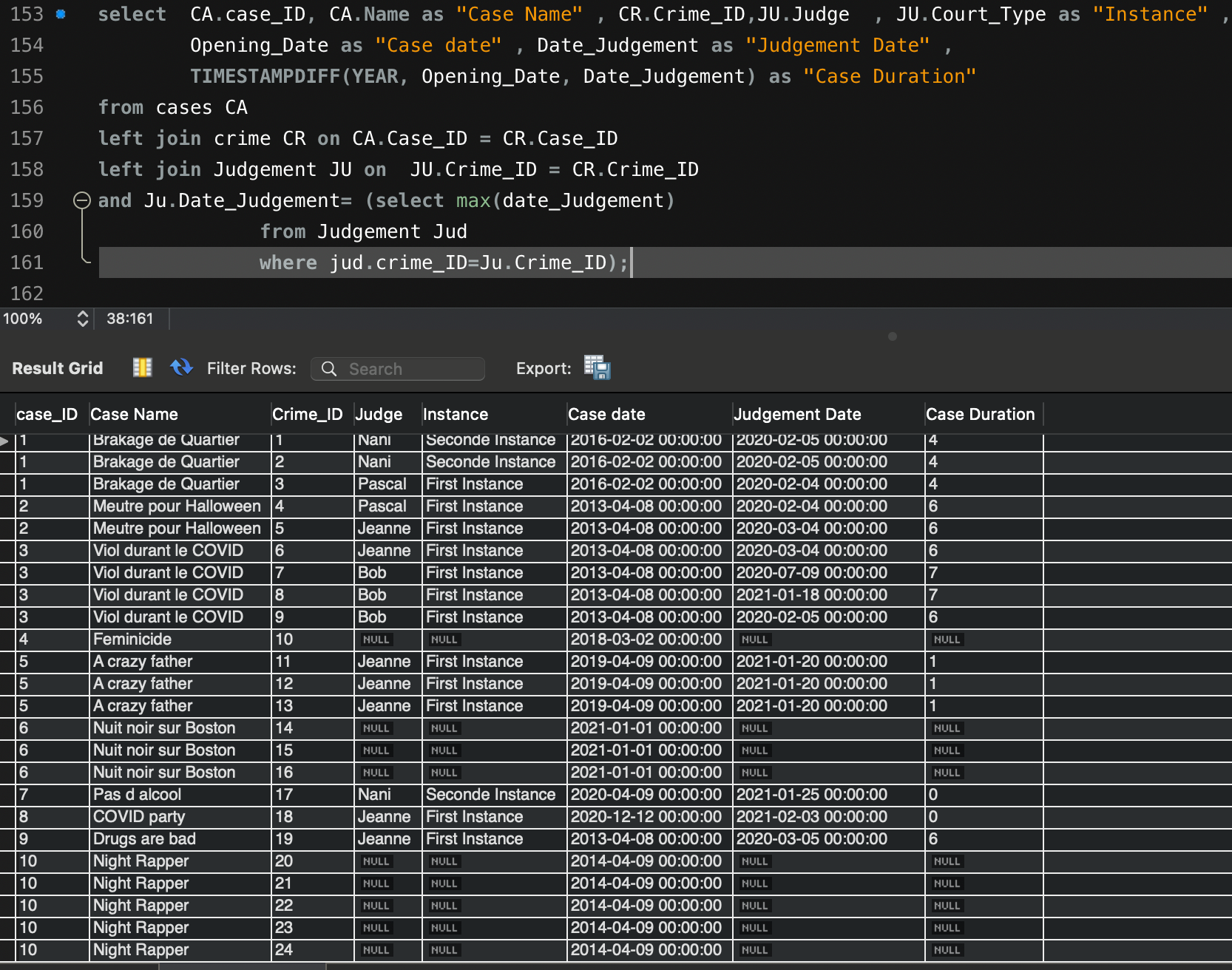
left join Judgement JU on JU.Crime\_ID = CR.Crime\_ID

and Ju.Date= (select max(date)

from Judgement Jud

where jud.crime\_ID=Ju.Crime\_ID);

Results:



# Procedure

Based on the above ER model and queries we came up with the following procedures. Because of the nature of the sector, in addition to the two output procedures, we also included a procedure without output to provide criminal records for the Boston Police Department.

## With Output

### Person details and number of crimes for a specific person

This code shows the first name , last name , birth and the number of crimes committed by someone. To find those informations , the procedure need a PersonID as an Input. The outputs ( out\_first\_name , out\_last\_name ,out\_birth) are renamed copies of existing columns but out\_Count\_Crime\_ID is an output that takes the sum of crimes order by CrimeID

Code:

CREATE DEFINER=`root`@`localhost` PROCEDURE `Criminal\_rec\_out\_prc`(

in in\_Person\_ID int,

out out\_first\_name varchar(45),

out out\_last\_name varchar(45),

out out\_Birth datetime,

out out\_Count\_Crime\_ID int)

**begin**

select

P.first\_name 'First Name',

P.last\_name 'Last Name',

p.Birth,

count(CR.Crime\_ID) into out\_first\_name ,

out\_last\_name ,

out\_Birth,

out\_Count\_Crime\_ID

from person P

left join Victim\_Criminal VC on VC.Person\_ID = P.Person\_ID

left join crime CR on Cr.Crime\_ID = VC.Crime\_ID

where P.Person\_ID = in\_Person\_ID

group by P.Person\_ID;

**END**

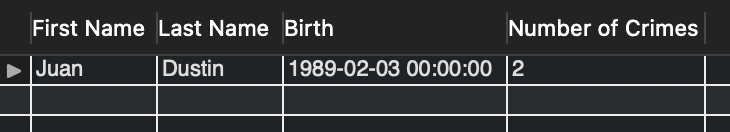
Call:

call Criminal\_rec\_out\_prc(10,@out\_first\_name, @out\_last\_name ,@out\_Birth, @out\_Count\_Crime\_ID);

Select:

select @out\_first\_name as "First Name", @out\_last\_name as "Last Name" ,@out\_Birth as "Birth",@out\_Count\_Crime\_ID as "Number of Crimes" ;

Results:



### Level of offense

This code will show CrimeID , Type of crime and a new column that will be the level of offence associated when the user calls the procedure with the CrimeID. The outputs ( out\_Crime\_ID and out\_Crime\_Type) are copies of existing columns. To obtain it, v\_type has been created in to highlight the type of level of offence associated with type of crimes, they are three of them: Felonies, Misdemeanor, Infraction. When the information is stored in V\_Store , we can then obtain the output that refers to it.

Code:

CREATE DEFINER=`root`@`localhost` PROCEDURE `Lvl\_of\_Offence\_PRC`(

in in\_Crime\_ID int,

out out\_Crime\_ID int,

out level\_of\_offence varchar(155),

out out\_Crime\_type varchar(105))

**BEGIN**

DECLARE v\_type varchar(10);

select Crime\_ID,Crime\_type ,Crime\_type

into out\_Crime\_ID,v\_type , out\_Crime\_type

from crime

where Crime\_ID=in\_Crime\_ID;

If v\_type = "Murder" or v\_type = "Rape"

then set level\_of\_offence = "Felonies";

elseif v\_type = "Theft" or v\_type = "Drug deal" or v\_type = "Assault"

then set level\_of\_offence = "Misdemeanor";

else

set level\_of\_offence = "Infraction";

end if;

END

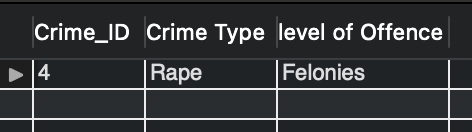
Call:

call Lvl\_of\_Offence\_PRC(4,@out\_Crime\_ID,@level\_of\_offence,@out\_Crime\_type);

Select:

select @out\_Crime\_ID as "Crime\_ID",@out\_Crime\_type as "Crime Type",@level\_of\_offence as "level of Offence";

Results:



## Without Output

### Criminal Record

This procedure is one of the procedures that highlights the usefulness of our SQI as it gathers, using the first and last names, all the information related to each individual who is involved as a criminal in the database. We get information such as the personID , first name, last name, age, but also the crimes, judgement (first instance, second instance,...) and penalty associated to it. The condition (only criminal) was placed to avoid information redundancy and thus obtain only one line of code for each committed crime.

Code:

CREATE DEFINER=`root`@`localhost` PROCEDURE `criminal\_rec\_prc`(

in in\_first\_name VARCHAR(45),

in in\_last\_name VARCHAR(45))

begin

select

P.Person\_ID ,

P.first\_name 'First Name',

P.last\_name 'Last Name',

p.Birth ,

CR.Crime\_ID ,

CR.Crime\_type,

JU.Court\_Type,

JU.Decision ,

PEN.Penalty\_Type

from person P

left join victim\_criminal VC on P.person\_id=VC.person\_id

left join Crime CR on CR.Crime\_ID=VC.Crime\_ID

left join Judgement JU on JU.Crime\_ID = CR.Crime\_ID

left join Penalty PEN on PEN.Judgement\_ID = JU.Judgement\_ID

where first\_name = in\_first\_name

and last\_name = in\_last\_name

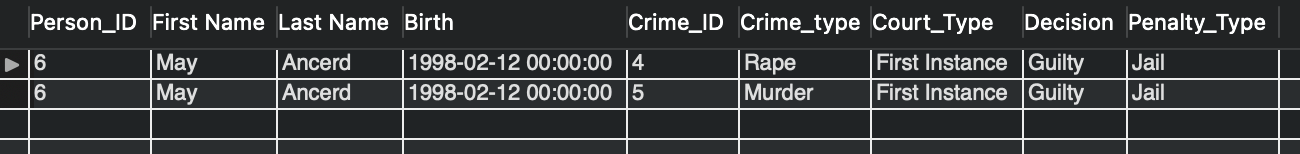
and VC.Implication\_Type="Criminal";

END

Call:

call criminal\_rec\_prc ("May","Ancerd");

Result:



APPENDIX

# CREATE TABLES:

## Person

CREATE TABLE `person` (

`Person\_ID` int NOT NULL,

`First\_Name` varchar(45) NOT NULL,

`Last\_Name` varchar(45) NOT NULL,

`Nationality` varchar(45) NOT NULL,

`Gender` varchar(45) NOT NULL,

`Adress` varchar(100) NOT NULL,

`Birth` datetime NOT NULL,

PRIMARY KEY (`Person\_ID`)

) ENGINE=InnoDB DEFAULT CHARSET=utf8;

## Victim Criminal

CREATE TABLE `victim\_criminal` (

`Implicated\_ID` int NOT NULL,

`Implication\_Type` enum('Victim','Criminal','Unknown') NOT NULL,

`Questionning` text,

`Status` enum('Dead','Alive','Missing','Unknown') NOT NULL,

`Crime\_ID` int NOT NULL,

`Person\_ID` int DEFAULT NULL,

PRIMARY KEY (`Implicated\_ID`),

KEY `fk\_Implicated\_Person.1\_idx` (`Person\_ID`),

KEY `fk\_Victim\_Criminal\_crime1\_idx` (`Crime\_ID`),

CONSTRAINT `fk\_Implicated\_Person.1` FOREIGN KEY (`Person\_ID`) REFERENCES `person` (`Person\_ID`),

CONSTRAINT `fk\_Victim\_Criminal\_crime1` FOREIGN KEY (`Crime\_ID`) REFERENCES `crime` (`Crime\_ID`)

) ENGINE=InnoDB DEFAULT CHARSET=utf8;

## Crime

CREATE TABLE crime (

Crime\_ID int NOT NULL,

Crime\_type enum('Murder','Rape','Theft','Assault','Unauthorized event','Influence','Drug deal') NOT NULL,

Date\_Crime datetime NOT NULL,

Case\_ID int NOT NULL,

PRIMARY KEY (Crime\_ID),

KEY fk\_Crime.\_Cases.1\_idx (Case\_ID),

CONSTRAINT fk\_Crime.\_Cases.1 FOREIGN KEY (Case\_ID) REFERENCES Cases (Case\_ID)

) ENGINE=InnoDB DEFAULT CHARSET=utf8;

## Witness

CREATE TABLE `witness` (

`Witness\_ID` int NOT NULL,

`Questionning` text NOT NULL,

`Person\_ID` int NOT NULL,

`Case\_ID` int NOT NULL,

PRIMARY KEY (`Witness\_ID`),

KEY `fk\_Witness\_Person.1\_idx` (`Person\_ID`),

KEY `fk\_Witness\_Cases.1\_idx` (`Case\_ID`),

CONSTRAINT `fk\_Witness\_Cases.1` FOREIGN KEY (`Case\_ID`) REFERENCES `cases` (`Case\_ID`),

CONSTRAINT `fk\_Witness\_Person.1` FOREIGN KEY (`Person\_ID`) REFERENCES `person` (`Person\_ID`)

) ENGINE=InnoDB DEFAULT CHARSET=utf8;

## Cases

CREATE TABLE `cases` (

`Case\_ID` int NOT NULL,

`Name` varchar(45) NOT NULL,

`Officer` varchar(45) NOT NULL,

`Opening\_Date` datetime NOT NULL,

`Closing\_Date` datetime DEFAULT NULL,

PRIMARY KEY (`Case\_ID`)

) ENGINE=InnoDB DEFAULT CHARSET=utf8;

## Evidence

CREATE TABLE `evidence` (

`Evidence\_ID` int NOT NULL,

`type` enum('Weapon','Biological Evidence','Prints','Drug') NOT NULL,

`Collected\_Date` datetime NOT NULL,

`Description` varchar(45) NOT NULL,

`Case\_ID` int NOT NULL,

PRIMARY KEY (`Evidence\_ID`),

KEY `fk\_Evidence.\_Cases.1\_idx` (`Case\_ID`),

CONSTRAINT `fk\_Evidence.\_Cases.1` FOREIGN KEY (`Case\_ID`) REFERENCES `cases` (`Case\_ID`)

) ENGINE=InnoDB DEFAULT CHARSET=utf8;

## Judgement

CREATE TABLE `judgement` (

`Judgement\_ID` int NOT NULL,

`Court\_Type` enum('First Instance','Seconde Instance') NOT NULL,

`Judge` varchar(45) NOT NULL,

`Decision` enum('Guilty','Not Guilty') NOT NULL,

`Date\_Judgement` datetime NOT NULL,

`Crime\_ID` int NOT NULL,

PRIMARY KEY (`Judgement\_ID`),

KEY `fk\_Judgement\_crime1\_idx` (`Crime\_ID`),

CONSTRAINT `fk\_Judgement\_crime1` FOREIGN KEY (`Crime\_ID`) REFERENCES `crime` (`Crime\_ID`)

) ENGINE=InnoDB DEFAULT CHARSET=utf8;

## Penalty

CREATE TABLE `penalty` (

`Penalty\_ID` int NOT NULL,

`Penalty\_Type` enum('Jail','Fine') NOT NULL,

`Description` varchar(255) NOT NULL,

`End\_Penalty` datetime DEFAULT NULL,

`Prison\_ID` int DEFAULT NULL,

`Judgement\_ID` int DEFAULT NULL,

PRIMARY KEY (`Penalty\_ID`),

KEY `fk\_Penalty\_Prison.1\_idx` (`Prison\_ID`),

KEY `fk\_Penalty\_Judgement.1\_idx` (`Judgement\_ID`),

CONSTRAINT `fk\_Penalty\_Judgement.1` FOREIGN KEY (`Judgement\_ID`) REFERENCES `judgement` (`Judgement\_ID`),

CONSTRAINT `fk\_Penalty\_Prison.1` FOREIGN KEY (`Prison\_ID`) REFERENCES `prison` (`Prison\_ID`)

) ENGINE=InnoDB DEFAULT CHARSET=utf8;

## Prison

CREATE TABLE `prison` (

`Prison\_ID` int NOT NULL,

`name` varchar(45) NOT NULL,

`State` varchar(45) NOT NULL,

`Max\_Capacity` int NOT NULL,

PRIMARY KEY (`Prison\_ID`)

) ENGINE=InnoDB DEFAULT CHARSET=utf8;

# Insert Tables

## Person

INSERT INTO Person VALUES

(1,'Lol','Cerdan','FR','F','777 Brockton Avenue, Abington MA 2351','1996-04-23 00:00:00'),

(2,'Ines','Nadrec','AN','F','30 Memorial Drive, Avon MA 2322','1986-05-14 00:00:00'),

(3,'Seni','Ernac','ES','M','250 Hartford Avenue, Bellingham MA 2019','1998-03-02 00:00:00'),

(4,'Nise','Dacner','GE','M','700 Oak Street, Brockton MA 2301','1996-04-03 00:00:00'),

(5,'June','Racned','UK','F','66-4 Parkhurst Rd, Chelmsford MA 1824','1956-03-14 00:00:00'),

(6,'May','Ancerd','USA','M','591 Memorial Dr, Chicopee MA 1020','1998-02-12 00:00:00'),

(7,'Maxou','Maxi','SW','M','55 Brooksby Village Way, Danvers MA 1923','1996-02-28 00:00:00'),

(8,'Jeanne','Dutrieux','PO','F','137 Teaticket Hwy, East Falmouth MA 2536','1946-05-14 00:00:00'),

(9,'Paul','David','BE','M','42 Fairhaven Commons Way, Fairhaven MA 2719','1978-03-11 00:00:00'),

(10,'Juan','Dustin','IT','M','374 William S Canning Blvd, Fall River MA 2721','1989-02-03 00:00:00'),

(11,'Denise','Reynard','USA','F','121 Worcester Rd, Framingham MA 1701','1974-03-04 00:00:00'),

(12,'Pascal','Pearson','FR','M','677 Timpany Blvd, Gardner MA 1440','1988-12-03 00:00:00'),

(13,'Christian ','Durein ','MA','M','337 Russell St, Hadley MA 1035','1945-02-27 00:00:00'),

(14,'Evelyne','Fournier','FR','F','295 Plymouth Street, Halifax MA 2338','1970-02-05 00:00:00'),

(15,'Bob','Marchert','USA','M','1775 Washington St, Hanover MA 2339','1983-03-04 00:00:00'),

(16,'Caroll','Studt','JN','F','280 Washington Street, Hudson MA 1749','1969-03-21 00:00:00'),

(17,'Cristian','Brown','CH','M','20 Soojian Dr, Leicester MA 1524','1989-04-23 00:00:00'),

(18,'Laurin','Pant','AN','F','11 Jungle Road, Leominster MA 1453','1999-03-02 00:00:00'),

(19,'Yse','Aiello','ES','F','301 Massachusetts Ave, Lunenburg MA 1462','1997-04-03 00:00:00'),

(20,'Jenny','Jahangir','GE','F','780 Lynnway, Lynn MA 1905','1955-03-14 00:00:00'),

(21,'Lars','Morfin','UK','M','70 Pleasant Valley Street, Methuen MA 1844','1999-02-12 00:00:00'),

(22,'Chris','Nemec','USA','M','830 Curran Memorial Hwy, North Adams MA 1247','1990-02-28 00:00:00'),

(23,'Rocio','Nazarian','SW','F','1470 S Washington St, North Attleboro MA 2760','1935-05-14 00:00:00'),

(24,'Laura','Morfin','PO','F','506 State Road, North Dartmouth MA 2747','1989-03-11 00:00:00'),

(25,'Mudabbir','Morfin','BE','M','742 Main Street, North Oxford MA 1537','1961-02-03 00:00:00'),

(26,'Toni','Zhang','IT','M','72 Main St, North Reading MA 1864','1978-03-04 00:00:00'),

(27,'Fredrik','Nemec','USA','M','200 Otis Street, Northborough MA 1532','1963-12-03 00:00:00'),

(28,'Hannah','Pant','FR','F','180 North King Street, Northhampton MA 1060','1978-03-11 00:00:00'),

(29,'Khaja','Wang','MA','M','555 East Main St, Orange MA 1364','1989-02-03 00:00:00'),

(30,'Julia','Kromer','FR','F','555 Hubbard Ave-Suite 12, Pittsfield MA 1201','1974-03-04 00:00:00'),

(31,'Valentina','Chabanel','USA','F','300 Colony Place, Plymouth MA 2360','1988-12-03 00:00:00'),

(32,'Sebastian','Chabanel','USA','M','301 Falls Blvd, Quincy MA 2169','1945-02-27 00:00:00'),

(33,'Frida','Chabanel','USA','F','36 Paramount Drive, Raynham MA 2767','1970-02-05 00:00:00'),

(34,'Costanza','Chabanel','USA','F','450 Highland Ave, Salem MA 1970','1983-03-04 00:00:00'),

(35,'Costantin','Lopez','ES','M','1180 Fall River Avenue, Seekonk MA 2771','1969-03-21 00:00:00'),

(36,'Kyra','Resag','GE','F','1105 Boston Road, Springfield MA 1119','1989-04-23 00:00:00'),

(37,'Raafi','Khawaja','SW','M','100 Charlton Road, Sturbridge MA 1566','1999-03-02 00:00:00'),

(38,'Sair','Duro','PO','M','262 Swansea Mall Dr, Swansea MA 2777','1997-04-03 00:00:00'),

(39,'Paolo','Mellbye','BE','M','36 Paramount Drive, Raynham MA 2767','1955-03-14 00:00:00'),

(40,'Costantin','Fournier','USA','M','550 Providence Hwy, Walpole MA 2081','1997-04-03 00:00:00'),

(41,'Kyra','Marchert','ES','F','352 Palmer Road, Ware MA 1082','1955-03-14 00:00:00'),

(42,'Raafi','Studt','GE','M','3005 Cranberry Hwy Rt 6 28, Wareham MA 2538','1999-02-12 00:00:00'),

(43,'Sair','Brown','SW','M','250 Rt 59, Airmont NY 10901','1990-02-28 00:00:00'),

(44,'Paolo','Pant','PO','M','141 Washington Ave Extension, Albany NY 12205','1990-03-01 00:00:00');

## Victim Criminal

INSERT INTO Criminal\_Victim\_final VALUES

(1,'Criminal',NULL,'Alive',1,'9'),

(2,'Criminal',NULL,'Alive',2,'9'),

(3,'Criminal',NULL,'Alive',3,'1'),

(4,'Victim',NULL,'Dead',1,'2'),

(5,'Victim',NULL,'Dead',2,'2'),

(6,'Victim',NULL,'Dead',3,'2'),

(7,'Criminal',NULL,'Alive',4,'6'),

(8,'Criminal',NULL,'Alive',5,'6'),

(9,'Victim',NULL,'Dead',4,'3'),

(10,'Victim',NULL,'Dead',5,'3'),

(11,'Criminal',NULL,'Alive',6,'10'),

(12,'Criminal',NULL,'Alive',7,'10'),

(13,'Criminal',NULL,'Alive',8,'13'),

(14,'Criminal',NULL,'Alive',9,'13'),

(15,'Victim',NULL,'Alive',6,'14'),

(16,'Victim',NULL,'Alive',7,'14'),

(17,'Victim',NULL,'Alive',8,'17'),

(18,'Victim',NULL,'Alive',9,'17'),

(19,'Victim',NULL,'Dead',10,'37'),

(20,'Criminal',NULL,'Dead',11,'31'),

(21,'Criminal',NULL,'Dead',12,'31'),

(22,'Criminal',NULL,'Dead',13,'31'),

(23,'Victim',NULL,'Dead',11,'32'),

(24,'Victim',NULL,'Dead',12,'33'),

(25,'Victim',NULL,'Dead',13,'34'),

(26,'Criminal',NULL,'Alive',14,'18'),

(27,'Criminal',NULL,'Alive',15,'18'),

(28,'Criminal',NULL,'Alive',16,'18'),

(29,'Victim',NULL,'Dead',14,'19'),

(30,'Victim',NULL,'Dead',15,'19'),

(31,'Victim',NULL,'Dead',16,'19'),

(32,'Criminal',NULL,'Alive',17,'20'),

(33,'Criminal',NULL,'Alive',18,'21'),

(34,'Criminal',NULL,'Alive',18,'22'),

(35,'Criminal',NULL,'Alive',18,'23'),

(36,'Criminal',NULL,'Alive',18,'24'),

(37,'Criminal',NULL,'Alive',18,'25'),

(38,'Criminal',NULL,'Alive',18,'26'),

(39,'Criminal',NULL,'Alive',19,'27'),

(40,'Victim',NULL,'Alive',20,'28'),

(41,'Victim',NULL,'Alive',21,'29'),

(42,'Victim',NULL,'Alive',22,'30'),

(43,'Victim',NULL,'Alive',23,'35'),

(44,'Victim',NULL,'Alive',24,'36'),

(45,'Criminal',NULL,'Unknown',20,'Null'),

(46,'Criminal',NULL,'Unknown',21,'Null'),

(47,'Criminal',NULL,'Unknown',22,'Null'),

(48,'Criminal',NULL,'Unknown',23,'Null'),

(49,'Criminal',NULL,'Unknown',24,'Null'),

(50,'Criminal',NULL,'Unknown',10,'Null');

## Crime

INSERT INTO crime VALUES

(1,'Murder','2016-01-31 00:00:00',1),

(2,'Theft','2016-01-31 00:00:00',1),

(3,'Theft','2016-01-31 00:00:00',1),

(4,'Rape','2013-04-08 00:00:00',2),

(5,'Murder','2013-04-08 00:00:00',2),

(6,'Assault','2013-04-08 00:00:00',3),

(7,'Assault','2013-04-08 00:00:00',3),

(8,'Assault','2013-04-08 00:00:00',3),

(9,'Assault','2013-04-08 00:00:00',3),

(10,'Murder','2018-03-02 00:00:00',4),

(11,'Murder','2019-03-09 00:00:00',5),

(12,'Murder','2019-03-09 00:00:00',5),

(13,'Murder','2019-03-09 00:00:00',5),

(14,'Murder','2021-01-01 00:00:00',6),

(15,'Theft','2021-01-01 00:00:00',6),

(16,'Rape','2021-01-01 00:00:00',6),

(17,'Influence','2020-04-09 00:00:00',7),

(18,'Unauthorized event','2020-12-12 00:00:00',8),

(19,'Drug deal','2013-04-08 00:00:00',9),

(20,'Rape','2014-04-09 00:00:00',10),

(21,'Rape','2014-04-13 00:00:00',10),

(22,'Rape','2014-04-18 00:00:00',10),

(23,'Rape','2014-04-22 00:00:00',10),

(24,'Rape','2014-04-25 00:00:00',10);

## Cases

INSERT INTO Case VALUES

(1,'Brakage de Quartier','Denise','2016-02-02 00:00:00','2020-02-05'),

(2,'Meutre pour Halloween','Paul','2013-04-08 00:00:00','2021-01-16'),

(3,'Viol durant le COVID','Carroll','2013-04-08 00:00:00','2021-01-16'),

(4,'Feminicide','Carroll','2018-03-02 00:00:00','NULL'),

(5,'A crazy father','Denise','2019-04-09 00:00:00','2021-01-15'),

(6,'Nuit noir sur Boston','Denise','2021-01-01 00:00:00','NULL'),

(7,'Pas d alcool','Paul','2020-04-09 00:00:00','2020-05-10'),

(8,'COVID party','Denise','2020-12-12 00:00:00','2021-12-12'),

(9,'Drugs are bad','Paul','2013-04-08 00:00:00','2020-02-05'),

(10,'Night Rapper','Denise','2014-04-09 00:00:00','NULL');

## Witness

INSERT INTO Witness VALUES

(1,7,1,'slt'),

(2,4,2,'tg'),

(3,11,3,'slt ftg'),

(4,7,3,'ouesh je me suis perdu'),

(5,38,4,'bla'),

(6,39,8,'bruit'),

(7,40,8,'buot'),

(8,41,8,'buits'),

(9,42,6,'bri'),

(10,43,9,'blon');

## Evidence

INSERT INTO Evidences VALUES

(1,'Weapon','2020-02-02 00:00:00','Gun',1),

(2,'Weapon','2019-04-03 00:00:00','Knife',2),

(3,'Biological Evidence','2020-03-04 00:00:00','Sperm',3),

(4,'Weapon','2018-03-03 00:00:00','Gun',4),

(5,'Biological Evidence','2018-03-03 00:00:00','Sperm',4),

(6,'Weapon','2019-09-04 00:00:00','Gun',5),

(7,'Biological Evidence','2021-02-01 00:00:00','Sperm',6),

(8,'Drug','2013-04-09 00:00:00','Canabis',9),

(9,'Drug','2013-04-09 00:00:00','Cocaine',9),

(10,'Biological Evidence','2014-09-06 00:00:00','Sperm',10);

## Judgement

INSERT INTO judgement VALUES

(1,'First Instance','Pascal','Guilty','2020-02-04 00:00:00',1),

(2,'Seconde Instance','Nani','Not Guilty','2020-02-05 00:00:00',1),

(3,'First Instance','Pascal','Guilty','2020-02-04 00:00:00',2),

(4,'Seconde Instance','Nani','Not Guilty','2020-02-05 00:00:00',2),

(5,'First Instance','Pascal','Not Guilty','2020-02-04 00:00:00',3),

(6,'First Instance','Pascal','Guilty','2020-02-04 00:00:00',4),

(7,'First Instance','Jeanne','Guilty','2020-03-04 00:00:00',5),

(8,'First Instance','Jeanne','Guilty','2020-03-04 00:00:00',6),

(9,'First Instance','Bob','Guilty','2020-07-09 00:00:00',7),

(10,'First Instance','Bob','Not Guilty','2021-01-18 00:00:00',8),

(11,'First Instance','Bob','Not Guilty','2020-02-05 00:00:00',9),

(12,'First Instance','Jeanne','Guilty','2021-01-20 00:00:00',11),

(13,'First Instance','Jeanne','Guilty','2021-01-20 00:00:00',12),

(14,'First Instance','Jeanne','Guilty','2021-01-20 00:00:00',13),

(15,'First Instance','Jeanne','Guilty','2020-10-09 00:00:00',17),

(16,'First Instance','Jeanne','Guilty','2021-02-03 00:00:00',18),

(17,'First Instance','Jeanne','Guilty','2020-03-05 00:00:00',19),

(18,'Seconde Instance','Nani','Guilty','2021-01-25 00:00:00',17);

## Penalty

INSERT INTO penalty VALUES

(1,'Jail','10 Years','2030-02-04','1',1),

(2,'Jail','10 Years','2030-02-04','1',3),

(3,'Jail','20 Years','2030-02-04','5',6),

(4,'Jail','20 Years','2030-02-04','5',7),

(5,'Jail','20 Years','2030-02-04','5',8),

(6,'Jail','20 Years','2030-02-04','5',9),

(7,'Jail','99 years','2120-01-20','10',12),

(8,'Jail','99 years','2120-01-20','10',13),

(9,'Jail','99 years','2120-01-20','10',14),

(10,'Jail','6 months','2021-10-03','2',15),

(11,'Fine','10000 Dollars','NULL','NULL',16),

(12,'Jail','20 Years','2040-03-05','2',17),

(13,'Fine','10000 Dollars','NULL','NULL',18);

## Prison

INSERT INTO Prison VALUES

(1,'US Penitentiary Marion','Illinois',1000),

(2,'Rikers island','New York',14000),

(3,'Louisiana State Penitentiary','Louisiana',5000),

(4,'Leavenworth Federal Penitentiary','Kansas',2000),

(5,'Folson State Prison','California',1813),

(6,'Attica Correctional Facility','New York',2150),

(7,'US Penitentiary Atlanta','Georgia',2000),

(8,'Sing Sing','New York',1700),

(9,'San Quentin State Prison','California',3302),

(10,'ADX Florence Facility','Colorado',490);