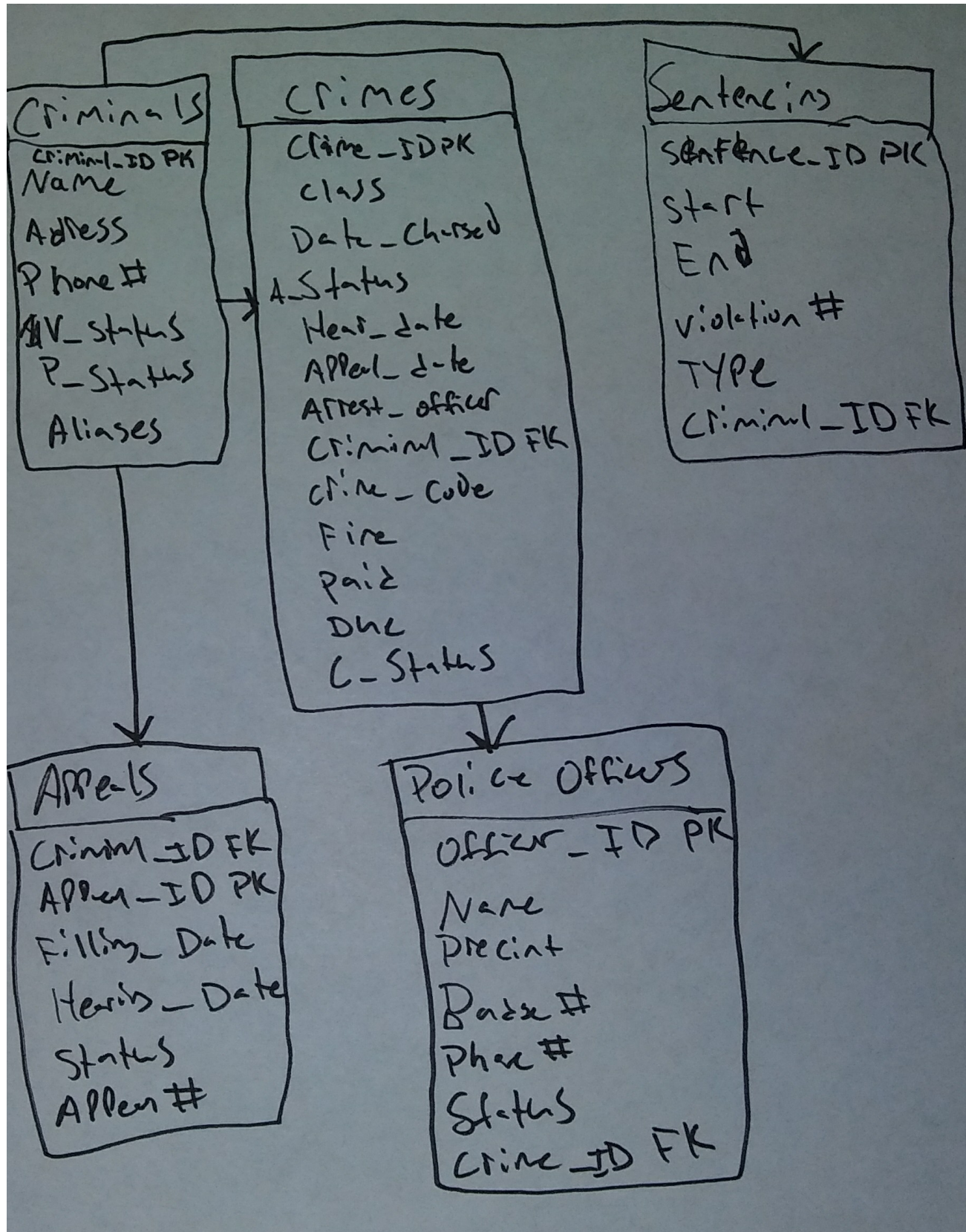


## PART 1 ER



## **PART 2 SCRIPT**

CREATE TABLE Aliases

(Alias\_ID NUMBER(6), Criminal\_ID NUMBER(6,0), Alias VARCHAR2(10));

CREATE TABLE Criminals

(Criminal\_ID NUMBER(6,0), Last VARCHAR2(15), First VARCHAR2(10),  
Street VARCHAR2(30), City VARCHAR2(20), State CHAR(2), Zip CHAR(5),  
Phone CHAR(10), V\_status CHAR(1) DEFAULT 'N', P\_status CHAR(1) DEFAULT 'N');

CREATE TABLE Crimes

(Crime\_ID NUMBER(9,0), Criminal\_ID NUMBER(6,0), Classification CHAR(1),  
Data\_charged DATE, Status CHAR(2), Hearing\_date DATE, Appeal\_cut\_date DATE);

CREATE TABLE Sentences

(Sentence\_ID NUMBER(6), Criminal\_ID NUMBER(6), Type CHAR(1), Prob\_ID NUMBER(5),  
Start\_date DATE, End\_date DATE, Violations NUMBER(3));

CREATE TABLE Prob\_officers

(Prob\_ID NUMBER(5), Last VARCHAR2(15), First VARCHAR2(10), Street VARCHAR2(30),  
City VARCHAR2(20), State CHAR(2), Zip CHAR(5), Phone CHAR(10), Email VARCHAR(30),  
Status CHAR(1) DEFAULT 'A');

CREATE TABLE Crime\_charges

(Charge\_ID NUMBER(10,0), Crime\_ID NUMBER(9,0), Crime\_code NUMBER(3,0),  
Charge\_status CHAR(2), Fine\_amount NUMBER(7,2), Court\_fee NUMBER(7,2),  
Amount\_paid NUMBER(7,2), Pay\_due\_date DATE);

CREATE TABLE Crime\_officers

(Crime\_ID NUMBER(9,0), Officer\_ID NUMBER(8,0));

CREATE TABLE Officers

(Officer\_ID NUMBER(8,0), Last VARCHAR2(15), First VARCHAR2(10), Precinct CHAR(4),  
Badge VARCHAR2(14), Phone CHAR(10), Status CHAR(1) DEFAULT 'A');

CREATE TABLE Appeals

(Appeal\_ID NUMBER(5), Crime\_ID NUMBER(9,0), Filing\_date DATE, Hearing\_date DATE,  
Status CHAR(1) DEFAULT 'P');

CREATE TABLE Crime\_codes

(Crime\_codes NUMBER(3,0), Code\_description(30));

## SECTION B

ALTER TABLE Crimes

MODIFY Classification DEFAULT 'U';

ALTER TABLE Crimes

ADD (Date\_Recorded DATE DEFAULT SYSDATE);

ALTER TABLE Prob\_officers

ADD (Pager# NUMBER(10));

ALTER TABLE Aliases

MODIFY (Alias VARCHAR2(20));

## PART 3

Table Name	Column(s)	Constraint Type	Condition
Aliases	Alias	PK	-
Criminals	Criminal_ID	PK	-
Crimes	Crime_ID	PK	-
Sentences	Sentence_ID	PK	-
Officers	Officer_ID	PK	-
Crime_Codes	Crime_code	PK	-
Aliases	Criminal_ID	FK	Ref Criminals
Crimes	Criminal_ID	FK	Ref Criminals
Sentences	Criminal_ID	FK	Ref Criminals
Criminals	V_status	Check	Y or N
Criminals	P_status	Check	Y or N
Crimes	Classification	Check	F ,M, O, or U
Crimes	Status	Check	CL, CA, or IA
Sentences	Type	Check	J, H, or P
Prob_officers	Status	Check	A or I
Officers	Status	Check	A or I

DROP TABLE Appeals;

DROP TABLE Crime\_officers;

DROP TABLE Crime\_charges;

ALTER TABLE Aliases

ADD CONSTRAINT Aliases\_id\_pk PRIMARY KEY (Alias\_ID);

ALTER TABLE Criminals

ADD CONSTRAINT Criminals\_id\_pk PRIMARY KEY (Criminal\_ID);

```

ALTER TABLE Crimes
  ADD CONSTRAINT Crimes_id_pk PRIMARY KEY (Crime_ID);

ALTER TABLE Sentences
  ADD CONSTRAINT Sentences_id_pk PRIMARY KEY (Sentence_ID);

ALTER TABLE Officers
  ADD CONSTRAINT Officers_id_pk PRIMARY KEY (Officer_ID);

ALTER TABLE Crime_codes
  ADD CONSTRAINT Crime_codes_pk PRIMARY KEY (Crime_code);

ALTER TABLE Aliases
  ADD CONSTRAINT Aliases_Criminal_fk FOREIGN KEY (Criminal_ID)
  REFERENCES Criminals(Criminal_ID);

ALTER TABLE Crimes
  ADD CONSTRAINT Crimes_Criminal_fk FOREIGN KEY (Criminal_ID)
  REFERENCES Criminals(Criminal_ID);

ALTER TABLE Sentences
  ADD CONSTRAINT Sentences_Criminal_fk FOREIGN KEY (Criminal_ID)
  REFERENCES Criminals(Criminal_ID);

ALTER TABLE Criminals
  ADD CONSTRAINT Criminals_Vstatus_ck CHECK (V_status IN('Y','N'));

ALTER TABLE Criminals
  ADD CONSTRAINT Criminals_Pstatus_ck CHECK (P_status IN('Y','N'));

ALTER TABLE Crimes
  ADD CONSTRAINT Classification_ck CHECK (Classification IN('F','M','O','U'));

ALTER TABLE Crimes
  ADD CONSTRAINT Status_ck CHECK (Status IN('CL','CA','IA'));

ALTER TABLE Sentences
  ADD CONSTRAINT Sentences_ck CHECK (Type IN('J','H','P'));

ALTER TABLE Prob_officers
  ADD CONSTRAINT Prob_ck CHECK (Status IN('A','T'));

ALTER TABLE Officers
  ADD CONSTRAINT Officers_ck CHECK (Status IN('A','T'));

CREATE TABLE Appeals
  (Appeal_ID NUMBER(5) PRIMARY KEY, Crime_ID NUMBER(9,0) REFERENCES Crimes
  (Crime_ID), Filing_date DATE, Hearing_date DATE,
  Status CHAR(1) DEFAULT 'P', CONSTRAINT Appeals_ck CHECK (Status IN('P','A','D')));

```

```
CREATE TABLE Crime_officers
(Crime_ID NUMBER(9,0) REFERENCES Crimes (Crime_ID),
Officer_ID NUMBER(8,0) PRIMARY KEY);
```

```
CREATE TABLE Crime_charges
(Charge_ID NUMBER(10,0) PRIMARY KEY, Crime_ID NUMBER(9,0) REFERENCES
Crimes (Crime_ID), Crime_code NUMBER(3,0), Charge_status CHAR(2),
Fine_amount NUMBER(7,2), Court_fee NUMBER(7,2),
Amount_paid NUMBER(7,2), Pay_due_date DATE,
CONSTRAINT Crime_charges_ck CHECK (Charge_status IN('PD','GL','NG')));
```

## PART 4

### 1(a)

Rows	10	Clear Command	Find Tables	Save	Run
<pre>INSERT INTO Criminals (Criminal_ID, Last, First, Street, City, State, Zip, Phone, V_Status, P_status) VALUES (:Criminal_ID, :Last, :First, :Street, :City, :State, :Zip, :Phone, :V_Status, :P_status)</pre>					
<div>Results Explain Describe Saved SQL History</div>					

### 1(b) (Not sure why the default values didnt load.)

Rows10

Clear Command

Find Tables

Save

Run

SELECT \* FROM Criminals

Results

Explain

Describe

Saved SQL

History

CRIMINAL_ID	LAST	FIRST	STREET	CITY	STATE	ZIP	PHONE	V_STATUS	P_STATUS
1017	Painter	Troy	77 Ship Lane	Norfolk	VA	22093	7677655454	-	-
1015	Fenter	Jim	-	Chesapeake	VA	23320	-	-	-
1016	Saunder	Bill	11 Apple Rd	Virginia Beach	VA	23455	7678217443	-	-

3 rows returned in 0.00 seconds

Download

### 1(c-g)

```
ALTER TABLE Criminals
  ADD (Mail_flag CHAR(1));
```

```
UPDATE Criminals
  SET Mail_flag='Y';
```

```
UPDATE Criminals
  SET Mail_flag='N' WHERE Street IS NULL;
```

```
UPDATE Criminals
  SET Phone='7225659032' WHERE Criminal_ID=1016;
```

```
DELETE FROM Criminals
  WHERE Criminal_ID=1017;
```

### 2(a)

```
INSERT INTO Crimes (Crime_ID, Criminal_ID, Classification, Date_charged, Status)
VALUES(100,1010,'M','15-JUL-09', 'PD');
```

Error: ORA-02290: check constraint (US\_B672\_SQL\_S06.CRIMES\_STATUS\_CK) violated

Crime Status cannot be 'PD'. Just CL, CA, or IA

### 2(b)

```
INSERT INTO Crimes (Crime_ID, Criminal_ID, Classification, Date_charged, Status)
VALUES(130,1016,'M', '15-JUL-09','PD');
```

Error: ORA-02290: check constraint (US\_B672\_SQL\_S06.CRIMES\_STATUS\_CK) violated

Crime Status cannot be 'PD'

**2(c)**

```
INSERT INTO Crimes (Crime_ID, Criminal_ID, Classification, Date_charged, Status)
VALUES(130,1016,'P', '15-JUL-09','CL');
```

Error: ORA-02290: check constraint (US\_B672\_SQL\_S06.CRIMES\_CLASS\_CK) violated

Crime Class cannot be 'P'