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#4 Case Study

1. DROP TABLE Appeals PURGE;

DROP TABLE Crime\_officers PURGE;

DROP TABLE Crime\_charges PURGE;

2. ALTER TABLE Aliases

ADD CONSTRAINT aliases\_pk PRIMARY KEY (alias\_id);

ALTER TABLE Criminals

ADD CONSTRAINT criminals\_pk PRIMARY KEY (criminal\_id);

ALTER TABLE Crimes

ADD CONSTRAINT crimes\_pk PRIMARY KEY (crime\_id);

ALTER TABLE Sentences

ADD CONSTRAINT sentences\_pk PRIMARY KEY (sentence\_id);

ALTER TABLE Prob\_officers

ADD CONSTRAINT prob\_officers\_pk PRIMARY KEY (prob\_id);

ALTER TABLE Officers

ADD CONSTRAINT officers\_pk PRIMARY KEY (officer\_id);

ALTER TABLE Crime\_codes

ADD CONSTRAINT crime\_codes\_pk PRIMARY KEY (crime\_code);

ALTER TABLE Aliases

ADD CONSTRAINT aliases\_fk FOREIGN KEY (criminal\_id)

REFERENCES Criminals (criminal\_id);

ALTER TABLE Criminals

MODIFY (Last CONSTRAINT criminals\_nn NOT NULL);

ALTER TABLE Criminals

MODIFY (First CONSTRAINT first\_nn NOT NULL);

ALTER TABLE Criminals

MODIFY (Street CONSTRAINT street\_nn NOT NULL);

ALTER TABLE Criminals

MODIFY (City CONSTRAINT city\_nn NOT NULL);

ALTER TABLE Criminals

MODIFY (State CONSTRAINT state\_nn NOT NULL);

ALTER TABLE Criminals

MODIFY (ZIP CONSTRAINT zip\_nn NOT NULL);

ALTER TABLE Criminals

ADD CONSTRAINT criminals\_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 crimes\_fk FOREIGN KEY (criminal\_id)

REFERENCES Criminals (criminal\_id);

ALTER TABLE Crimes

ADD CONSTRAINT crimes\_ck CHECK (classification IN ('F', 'M', 'O', 'U'));

ALTER TABLE Crimes

MODIFY (Classification CONSTRAINT crimes\_nn NOT NULL);

ALTER TABLE Crimes

MODIFY (Date\_charged CONSTRAINT datecharged\_nn NOT NULL);

ALTER TABLE Crimes

ADD CONSTRAINT crimes\_status\_ck CHECK (status IN ('CL', 'CA', 'IA'));

ALTER TABLE Crimes

MODIFY (Status CONSTRAINT crimes\_status\_nn NOT NULL);

ALTER TABLE Sentences

ADD CONSTRAINT sentences\_fk FOREIGN KEY (criminal\_id)

REFERENCES Criminals (criminal\_id);

ALTER TABLE Sentences

ADD CONSTRAINT sentences\_prob\_id\_fk FOREIGN KEY (prob\_id)

REFERENCES Prob\_officers (prob\_id);

ALTER TABLE Sentences

ADD CONSTRAINT sentences\_ck CHECK (type IN ('J', 'H', 'P'));

ALTER TABLE Sentences

MODIFY (Type CONSTRAINT sentences\_type\_nn NOT NULL);

ALTER TABLE Sentences

MODIFY (Start\_date CONSTRAINT sentences\_startdate\_nn NOT NULL);

ALTER TABLE Sentences

MODIFY (Violations CONSTRAINT sentences\_violation\_nn NOT NULL);

ALTER TABLE Prob\_officers

MODIFY (Last CONSTRAINT prob\_officers\_last\_nn NOT NULL);

ALTER TABLE Prob\_officers

MODIFY (First CONSTRAINT prob\_officers\_first\_nn NOT NULL);

ALTER TABLE Prob\_officers

MODIFY (Street CONSTRAINT prob\_officers\_street\_nn NOT NULL);

ALTER TABLE Prob\_officers

MODIFY (City CONSTRAINT prob\_officers\_city\_nn NOT NULL);

ALTER TABLE Prob\_officers

MODIFY (State CONSTRAINT prob\_officers\_state\_nn NOT NULL);

ALTER TABLE Prob\_officers

MODIFY (Status CONSTRAINT prob\_officers\_status\_nn NOT NULL);

ALTER TABLE Prob\_officers

ADD CONSTRAINT prob\_officers\_ck CHECK (status IN ('A', 'I'));

ALTER TABLE Officers

MODIFY (Last CONSTRAINT officers\_last\_nn NOT NULL);

ALTER TABLE Officers

MODIFY (First CONSTRAINT officers\_first\_nn NOT NULL);

ALTER TABLE Officers

MODIFY (Precinct CONSTRAINT officers\_precinct\_nn NOT NULL);

ALTER TABLE Officers

MODIFY (Phone CONSTRAINT officers\_phone\_nn NOT NULL);

ALTER TABLE Officers

ADD CONSTRAINT officers\_uk UNIQUE (badge);

ALTER TABLE Officers

ADD CONSTRAINT officers\_ck CHECK (status IN ('A', 'I'));

ALTER TABLE Officers

MODIFY (Status CONSTRAINT officers\_status\_nn NOT NULL);

ALTER TABLE Crime\_codes

MODIFY (code\_description CONSTRAINT code\_description\_nn NOT NULL);

3. CREATE TABLE Appeals (

Appeal\_ID NUMBER (5),

Crime\_ID NUMBER (9),

Filing\_date Date NOT NULL,

Hearing\_Date Date NOT NULL,

Status CHAR (1) DEFAULT 'P',

CONSTRAINT appeals\_pk PRIMARY KEY (appeal\_id),

CONSTRAINT appeals\_fk FOREIGN KEY (crime\_id)

REFERENCES Crimes (crime\_id),

CONSTRAINT appeals\_status\_ck CHECK (status IN ('P', 'A', 'D'))

);

CREATE TABLE Crime\_officers (

Crime\_ID NUMBER (9),

Officer\_ID NUMBER (8),

CONSTRAINT crime\_officers\_crimeid\_fk FOREIGN KEY (crime\_id)

REFERENCES Crimes (crime\_id),

CONSTRAINT crime\_officers\_officerid\_fk FOREIGN KEY (officer\_id)

REFERENCES Officers (officer\_id)

);

CREATE TABLE Crime\_charges (

Charge\_ID NUMBER (10),

Crime\_ID NUMBER (9),

Crime\_code NUMBER (3),

Charge\_status CHAR (2) NOT NULL,

Fine\_amount NUMBER (7) NOT NULL,

Court\_fee NUMBER (7) NOT NULL,

Pay\_due\_date Date NOT NULL,

CONSTRAINT crime\_charges\_pk PRIMARY KEY (charge\_id),

CONSTRAINT crime\_charges\_crimeid\_fk FOREIGN KEY (crime\_id)

REFERENCES Crimes (crime\_id),

CONSTRAINT crime\_charges\_crimecode\_fk FOREIGN KEY (crime\_code)

REFERENCES Crime\_codes (crime\_code),

CONSTRAINT crime\_charges\_ck CHECK (charge\_status IN ('PD', 'GL', 'NG'))

);