



# CS 434 PROJECT 3

Joshua Haupt, Charles Helf

Joshua Haupt  
jhaupt@siue.edu

3.) Tables were created through both the MariaDB console, and through HEIDISQL as demonstrated below.

4.) Data was loaded through both the MariaDB console, and through HEIDISQL as demonstrated in this report. Bot used standard MySQL insert statements. Below are the tables filled with test data.

**All insert queries worked resulting in:**

```
MariaDB [Project3]> INSERT INTO CrimeReport (ReportNumber, DateFiled, Description) VALUES(109, '2002-10-19', 'Sue Hollenbeck Area Test Desc9');
```

Query OK, 1 row affected (0.03 sec)

Unnamed-1\Project3\Statute\ - HeidiSQL 9.3.0.4984

File Edit Search Tools Help

Database filter Table filter

Host: 127.0.0.1 Database: Project3 Table: Statute Data Query\*

Project3:Statute: 5 rows total (approximately)

CodeDesignation	ElementsOfCrime
PEN-102	1,003,813
PEN-187	6,839
PEN-211	120,038
PEN-240	5,164,921
PEN-404	583,860

```
167 SELECT * FROM `Project3`.`StatusUpdate` LIMIT 1000;
168 SHOW CREATE TABLE `Project3`.`StatusUpdate`;
169 SHOW CREATE TABLE `Project3`.`Statute`;
170 SELECT * FROM `Project3`.`Statute` LIMIT 1000;
171 SHOW CREATE TABLE `Project3`.`Statute`;
```

1 : 1 Connected: 00:45 h MariaDB 10.1.17 Uptime: 3 days, 05:51 h Idle.

Unnamed-1\Project3>StatusUpdate\ - HeidiSQL 9.3.0.4984

File Edit Search Tools Help

Database filter Table filter

Host: 127.0.0.1 Database: Project3 Table: StatusUpdate Data Query\*

Project3.StatusUpdate: 5 rows total (approximately)

Stat_ReportNumber	RevisionNumber	DateRevised	Status
130,510,483	1	2013-05-26	2
130,510,483	2	2013-07-13	3
131,817,514	1	2013-10-18	2
131,817,514	2	2013-10-18	3
132,007,717	1	2013-03-20	1

```
164 SELECT * FROM `Project3`.`ReportedThrough` LIMIT 1000;
165 SHOW CREATE TABLE `Project3`.`ReportedThrough`;
166 SHOW CREATE TABLE `Project3`.`StatusUpdate`;
167 SELECT * FROM `Project3`.`StatusUpdate` LIMIT 1000;
168 SHOW CREATE TABLE `Project3`.`StatusUpdate`;
```

1 : 1 Connected: 00:44 h MariaDB 10.1.17 Uptime: 3 days, 05:51 h Idle.

Unnamed-1\Project3\ReportedThrough\ - HeidiSQL 9.3.0.4984

File Edit Search Tools Help

Database filter Table filter

Host: 127.0.0.1 Database: Project3 Table: ReportedThrough Data Query\*

Project3.ReportedThrough: 5 rows total (approximately)

Rep_ReportNumber	Rep_IncidentNumber
130,510,483	130,510,483
130,608,787	130,608,787
131,817,514	131,817,514
131,820,260	131,820,260
132,007,717	132,007,717

161 SELECT \* FROM `Project3`.`PoliceOfficer` LIMIT 1000;  
 162 SHOW CREATE TABLE `Project3`.`PoliceOfficer`;  
 163 SHOW CREATE TABLE `Project3`.`ReportedThrough`;  
 164 SELECT \* FROM `Project3`.`ReportedThrough` LIMIT 1000;  
 165 SHOW CREATE TABLE `Project3`.`ReportedThrough`;

1 : 1 Connected: 00:44 h MariaDB 10.1.17 Uptime: 3 days, 05:50 h Idle.

Unnamed-1\Project3\PoliceOfficer\ - HeidiSQL 9.3.0.4984

File Edit Search Tools Help

Database filter Table filter

Host: 127.0.0.1 Database: Project3 Table: PoliceOfficer Data Query\*

Project3.PoliceOfficer: 5 rows total (approximately)

DateGraduated	BadgeNumber	LastName	FirstName
1977-09-11	22	Davis	Miles
1983-07-22	76	Cornish	Eleanor
1992-03-13	406	Brown	Susan
1999-02-27	9,942	Jijekesh	Ryan
2002-10-18	12,001	Hershey	John

158 SELECT \* FROM `Project3`.`PoliceDepartment` LIMIT 1000;  
 159 SHOW CREATE TABLE `Project3`.`PoliceDepartment`;  
 160 SHOW CREATE TABLE `Project3`.`PoliceOfficer`;  
 161 SELECT \* FROM `Project3`.`PoliceOfficer` LIMIT 1000;  
 162 SHOW CREATE TABLE `Project3`.`PoliceOfficer`;

Connected: 00:44 h MariaDB 10.1.17 Uptime: 3 days, 05:50 h Idle.

Unnamed-1\Project3\PoliceDepartment\ - HeidiSQL 9.3.0.4984

File Edit Search Tools Help

Database filter Table filter

Host: 127.0.0.1 Database: Project3 Table: PoliceDepartment Data Query\*

Project3.PoliceDepartment: 5 rows total (approximately)

PrecinctNumber	Jurisdiction
1	Central Area
2	Rampart Area
3	Southwest Area
4	Hollenbeck Area
5	Harbor Area

155 SELECT \* FROM `Project3`.`MemberOf` LIMIT 1000;  
156 SHOW CREATE TABLE `Project3`.`MemberOf`;  
157 SHOW CREATE TABLE `Project3`.`PoliceDepartment`;  
158 SELECT \* FROM `Project3`.`PoliceDepartment` LIMIT 1000;  
159 SHOW CREATE TABLE `Project3`.`PoliceDepartment`;

1 : 1 Connected: 00:44 h MariaDB 10.1.17 Uptime: 3 days, 05:50 h Idle.

Unnamed-1\Project3\MemberOf\ - HeidiSQL 9.3.0.4984

File Edit Search Tools Help

Database filter Table filter

Host: 127.0.0.1 Database: Project3 Table: MemberOf Data Query\*

Project3.MemberOf: 5 rows total (approximately)

Mem_DateGraduated	Mem_BadgeNumber	Mem_PrecinctNumber
1977-09-11	22	1
1983-07-22	76	1
2002-10-18	12,001	1
1992-03-13	406	2
1999-02-27	9,942	2

152 SELECT \* FROM `Project3`.`FiledBy` LIMIT 1000;  
153 SHOW CREATE TABLE `Project3`.`FiledBy`;  
154 SHOW CREATE TABLE `Project3`.`MemberOf`;  
155 SELECT \* FROM `Project3`.`MemberOf` LIMIT 1000;  
156 SHOW CREATE TABLE `Project3`.`MemberOf`;

1 : 1 Connected: 00:43 h MariaDB 10.1.17 Uptime: 3 days, 05:49 h Idle.

Unnamed-1\Project3\FiledBy\ - HeidiSQL 9.3.0.4984

File Edit Search Tools Help Donate to the HeidiSQL project

Database filter Table filter Host: 127.0.0.1 Database: Project3 Table: FiledBy Data Query\*

Project3.FiledBy: 5 rows total (approximately) Next Show all Sorting Columns Filter

File_DateGraduated	File_BadgeNumber	File_ReportNumber
1983-07-22	76	130,510,483
1992-03-13	406	130,510,483
2002-10-18	12,001	131,817,514
1977-09-11	22	132,007,717
1999-02-27	9,942	132,007,717

149 SELECT \* FROM `Project3`.`DefinedBy` LIMIT 1000;  
 150 SHOW CREATE TABLE `Project3`.`DefinedBy`;  
 151 SHOW CREATE TABLE `Project3`.`FiledBy`;  
 152 SELECT \* FROM `Project3`.`FiledBy` LIMIT 1000;  
 153 SHOW CREATE TABLE `Project3`.`FiledBy`;

1 : 1 Connected: 00:43 h MariaDB 10.1.17 Uptime: 3 days, 05:49 h Idle.

Unnamed-1\Project3\DefinedBy\ - HeidiSQL 9.3.0.4984

File Edit Search Tools Help Donate to the HeidiSQL project

Database filter Table filter Host: 127.0.0.1 Database: Project3 Table: DefinedBy Data Query\*

Project3.DefinedBy: 5 rows total (approximately) Next Show all Sorting Columns Filter

Def_IncidentNumber	Def_CodeDesignation
130,608,787	PEN-187
132,007,717	PEN-187
130,510,483	PEN-211
131,817,514	PEN-404
131,820,260	PEN-404

146 SELECT \* FROM `Project3`.`CriminalIncident` LIMIT 1000;  
 147 SHOW CREATE TABLE `Project3`.`CriminalIncident`;  
 148 SHOW CREATE TABLE `Project3`.`DefinedBy`;  
 149 SELECT \* FROM `Project3`.`DefinedBy` LIMIT 1000;  
 150 SHOW CREATE TABLE `Project3`.`DefinedBy`;

1 : 1 Connected: 00:43 h MariaDB 10.1.17 Uptime: 3 days, 05:49 h Idle.

Unnamed-1\Project3\CriminalIncident\ - HeidiSQL 9.3.0.4984

File Edit Search Tools Help

Database filter Table filter

Host: 127.0.0.1 Database: Project3 Table: CriminalIncident Data Query\*

Project3.CriminalIncident: 5 rows total (approximately)

IncidentNumber	TimeOccurred	DateOccurred	Address
130,510,483	2,000	2013-05-25	WestSepulveda Boulevard
130,608,787	445	2013-03-10	Odin Street
131,817,514	1,730	2013-10-18	101st Street
131,820,260	745	2013-12-18	105th Street
132,007,717	2,015	2013-03-20	Oxford

143 SELECT \* FROM `Project3`.`CrimeReport` LIMIT 1000;  
 144 SHOW CREATE TABLE `Project3`.`CrimeReport`;  
 145 SHOW CREATE TABLE `Project3`.`CriminalIncident`;  
 146 SELECT \* FROM `Project3`.`CriminalIncident` LIMIT 1000;  
 147 SHOW CREATE TABLE `Project3`.`CriminalIncident`;

1 : 1 Connected: 00:42 h MariaDB 10.1.17 Uptime: 3 days, 05:49 h Idle.

Unnamed-1\Project3\CrimeReport\ - HeidiSQL 9.3.0.4984

File Edit Search Tools Help

Database filter Table filter

Host: 127.0.0.1 Database: Project3 Table: CrimeReport Data Query\*

Project3.CrimeReport: 5 rows total (approximately)

ReportNumber	DateFiled	Description
130,510,483	2013-05-26	PLAIN THEFT UNDER \$400. MISSING PURSE.
130,608,787	2013-03-10	TRAFFIC DR # EXPIRED
131,817,514	2013-10-18	TRAFFIC DR # EXPIRED
131,820,260	2013-12-18	TRAFFIC DR # EXPIRED
132,007,717	2013-03-20	TRAFFIC DR # EXPIRED

140 SELECT \* FROM `Project3`.`MemberOf` LIMIT 1000;  
 141 SHOW CREATE TABLE `Project3`.`MemberOf`;  
 142 SHOW CREATE TABLE `Project3`.`CrimeReport`;  
 143 SELECT \* FROM `Project3`.`CrimeReport` LIMIT 1000;  
 144 SHOW CREATE TABLE `Project3`.`CrimeReport`;

Connected: 00:41 h MariaDB 10.1.17 Uptime: 3 days, 05:47 h Idle.

3.) Tables were created through both the MariaDB console, and through HEIDISQL as demonstrated below.

The first screenshot shows the HeidiSQL interface with the 'PoliceDepartment' table being created. The table structure is defined as follows:

```
1 CREATE TABLE `PoliceDepartment` (
2   `PrecinctNumber` TINYINT(2) UNSIGNED NOT NULL,
3   `Jurisdiction` VARCHAR(50) NOT NULL,
4   PRIMARY KEY (`PrecinctNumber`)
5 )
6 COLLATE='latin1_swedish_ci'
7 ENGINE=InnoDB
8 ;
9
```

The second screenshot shows the HeidiSQL interface with the 'MemberOf' table being created. The table structure is defined as follows:

```
1 CREATE TABLE `MemberOf` (
2   `Mem_DateGraduated` DATE NOT NULL,
3   `Mem_BadgeNumber` SMALLINT(5) UNSIGNED NOT NULL,
4   `Mem_PrecinctNumber` TINYINT(2) UNSIGNED NOT NULL,
5   PRIMARY KEY (`Mem_DateGraduated`, `Mem_BadgeNumber`),
6   INDEX `Mem_PrecinctNumber` (`Mem_PrecinctNumber`),
7   CONSTRAINT `MemberOf_ibfk_1` FOREIGN KEY (`Mem_DateGraduated`, `Mem_BadgeNumber`) REFERENCES `PoliceOfficer` (`DateGraduated`, `BadgeNumber`),
8   CONSTRAINT `MemberOf_ibfk_2` FOREIGN KEY (`Mem_PrecinctNumber`) REFERENCES `PoliceDepartment` (`PrecinctNumber`)
9 )
10 COLLATE='latin1_swedish_ci'
11 ENGINE=InnoDB
12 ;
13
```

Both screenshots show the HeidiSQL interface with the 'Database: Project3' and 'Table: PoliceDepartment' (or 'MemberOf') selected. The interface includes a sidebar with a tree view of the database structure, a main editor area for the SQL code, and a bottom status bar showing the connection details.



Unnamed-1\Project3\FiledBy\ - HeidiSQL 9.3.0.4984

File Edit Search Tools Help

Host: 127.0.0.1 Database: Project3 Table: FiledBy Data Query\*

Database filter Table filter

Unnamed-1

- LA\_Crime\_Reporting
  - Project3
    - CrimeReport 224.0 KiB
    - CriminalIncident 16.0 KiB
    - DefinedBy 16.0 KiB
    - FiledBy 32.0 KiB**
    - MemberOf 32.0 KiB
    - PoliceDepartment 16.0 KiB
    - PoliceOfficer 16.0 KiB
    - ReportedThrough 32.0 KiB
    - StatusUpdate 16.0 KiB
    - Statute 16.0 KiB
  - cs434Proj3Test 192.0 KiB
  - information\_schema
  - mysql
  - performance\_schema

Basic Options Indexes Foreign keys Partitions CREATE code ALTER code

```

1 CREATE TABLE `FiledBy` (
2   `File_DateGraduated` DATE NOT NULL,
3   `File_BadgeNumber` SMALLINT(5) UNSIGNED NOT NULL,
4   `File_ReportNumber` INT(9) UNSIGNED NOT NULL,
5   PRIMARY KEY (`File_DateGraduated`, `File_BadgeNumber`),
6   INDEX `File_ReportNumber` (`File_ReportNumber`),
7   CONSTRAINT `FiledBy_ibfk_1` FOREIGN KEY (`File_DateGraduated`, `File_BadgeNumber`) REFERENCES `PoliceOfficer` (`DateGraduated`, `BadgeNumber`),
8   CONSTRAINT `FiledBy_ibfk_2` FOREIGN KEY (`File_ReportNumber`) REFERENCES `CrimeReport` (`ReportNumber`)
9 )
10 COLLATE='latin1_swedish_ci'
11 ENGINE=InnoDB
12 ;
13 ;

```

Columns: Add Remove Up Down

#	Name	Datatype	Length/Set	Unsign...	Allow N...	Zerofill	Default	Comment	Collation	Expression	Virtuality
1	File_DateGrad...	DATE		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No default				
2	File_BadgeNu...	SMALLINT	5	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No default				
3	File_ReportNu...	INT	9	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No default				

Help Discard Save

```

184 SHOW CREATE TABLE `Project3`.`Statute`;
185 SHOW CREATE TABLE `Project3`.`CrimeReport`;
186 SHOW CREATE TABLE `Project3`.`CriminalIncident`;
187 SHOW CREATE TABLE `Project3`.`DefinedBy`;
188 SHOW CREATE TABLE `Project3`.`FiledBy`;

```

Connected: 00:51 h MariaDB 10.1.17 Uptime: 3 days, 05:57 h Idle.

Unnamed-1\Project3\DefinedBy\ - HeidiSQL 9.3.0.4984

File Edit Search Tools Help

Host: 127.0.0.1 Database: Project3 Table: DefinedBy Data Query\*

Database filter Table filter

Unnamed-1

- LA\_Crime\_Reporting
  - Project3
    - CrimeReport 224.0 KiB
    - CriminalIncident 16.0 KiB
    - DefinedBy 32.0 KiB**
    - FiledBy 32.0 KiB
    - MemberOf 32.0 KiB
    - PoliceDepartment 16.0 KiB
    - PoliceOfficer 16.0 KiB
    - ReportedThrough 32.0 KiB
    - StatusUpdate 16.0 KiB
    - Statute 16.0 KiB
  - cs434Proj3Test 192.0 KiB
  - information\_schema
  - mysql
  - performance\_schema

Basic Options Indexes Foreign keys Partitions CREATE code ALTER code

```

1 CREATE TABLE `DefinedBy` (
2   `Def_IncidentNumber` INT(9) UNSIGNED NOT NULL,
3   `Def_CodeDesignation` VARCHAR(12) NOT NULL,
4   PRIMARY KEY (`Def_IncidentNumber`),
5   INDEX `Def_CodeDesignation` (`Def_CodeDesignation`),
6   CONSTRAINT `DefinedBy_ibfk_1` FOREIGN KEY (`Def_IncidentNumber`) REFERENCES `CriminalIncident` (`IncidentNumber`),
7   CONSTRAINT `DefinedBy_ibfk_2` FOREIGN KEY (`Def_CodeDesignation`) REFERENCES `Statute` (`CodeDesignation`)
8 )
9 COLLATE='latin1_swedish_ci'
10 ENGINE=InnoDB
11 ;
12 ;

```

Columns: Add Remove Up Down

#	Name	Datatype	Length/Set	Unsign...	Allow N...	Zerofill	Default	Comment	Collation	Expression	Virtuality
1	Def_Incident...	INT	9	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No default				
2	Def_CodeDesi...	VARCHAR	12	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No default				

Help Discard Save

```

183 SHOW CREATE TABLE `Project3`.`StatusUpdate`;
184 SHOW CREATE TABLE `Project3`.`Statute`;
185 SHOW CREATE TABLE `Project3`.`CrimeReport`;
186 SHOW CREATE TABLE `Project3`.`CriminalIncident`;
187 SHOW CREATE TABLE `Project3`.`DefinedBy`;

```

Connected: 00:51 h MariaDB 10.1.17 Uptime: 3 days, 05:57 h Idle.

Unnamed-1\Project3\CriminalIncident\ - HeidiSQL 9.3.0.4984

File Edit Search Tools Help

Host: 127.0.0.1 Database: Project3 Table: CriminalIncident Data Query\*

Database filter Table filter

Unamed-1

- LA\_Crime\_Reporting 224.0 KiB
  - Project3
    - CrimeReport 16.0 KiB
    - CriminalIncident 16.0 KiB
    - DefinedBy 32.0 KiB
    - FiledBy 32.0 KiB
    - MemberOf 32.0 KiB
    - PoliceDepartment 16.0 KiB
    - PoliceOfficer 16.0 KiB
    - ReportedThrough 32.0 KiB
    - StatusUpdate 16.0 KiB
    - Statute 16.0 KiB
  - cs434Proj3Test 192.0 KiB
  - information\_schema
  - mysql
  - performance\_schema

Basic Options Indexes Foreign keys Partitions CREATE code ALTER code

```

1 CREATE TABLE `CriminalIncident` (
2   `IncidentNumber` INT(9) UNSIGNED NOT NULL,
3   `TimeOccurred` SMALLINT(4) UNSIGNED NOT NULL,
4   `DateOccurred` DATE NOT NULL,
5   `Address` VARCHAR(50) NOT NULL,
6   PRIMARY KEY (`IncidentNumber`)
7 )
8 COLLATE='latin1_swedish_ci'
9 ENGINE=InnoDB
10 ;
11

```

Columns: Add Remove Up Down

#	Name	Datatype	Length/Set	Unsign...	Allow N...	Zerofill	Default	Comment	Collation	Expression	Virtuality
1	IncidentNum...	INT	9	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No default				
2	TimeOccurred	SMALLINT	4	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No default				
3	DateOccurred	DATE		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No default				
4	Address	VARCHAR	50	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No default				

Help Discard Save

```

182 SHOW CREATE TABLE `Project3`.`PoliceOfficer`;
183 SHOW CREATE TABLE `Project3`.`StatusUpdate`;
184 SHOW CREATE TABLE `Project3`.`Statute`;
185 SHOW CREATE TABLE `Project3`.`CrimeReport`;
186 SHOW CREATE TABLE `Project3`.`CriminalIncident`;

```

Connected: 00:50 h MariaDB 10.1.17 Uptime: 3 days, 05:57 h Idle

Unnamed-1\Project3\CrimeReport\ - HeidiSQL 9.3.0.4984

File Edit Search Tools Help

Host: 127.0.0.1 Database: Project3 Table: CrimeReport Data Query\*

Database filter Table filter

Unamed-1

- LA\_Crime\_Reporting 224.0 KiB
  - Project3
    - CrimeReport 16.0 KiB
    - CriminalIncident 16.0 KiB
    - DefinedBy 32.0 KiB
    - FiledBy 32.0 KiB
    - MemberOf 32.0 KiB
    - PoliceDepartment 16.0 KiB
    - PoliceOfficer 16.0 KiB
    - ReportedThrough 32.0 KiB
    - StatusUpdate 16.0 KiB
    - Statute 16.0 KiB
  - cs434Proj3Test 192.0 KiB
  - information\_schema
  - mysql
  - performance\_schema

Basic Options Indexes Foreign keys Partitions CREATE code ALTER code

```

1 CREATE TABLE `CrimeReport` (
2   `ReportNumber` INT(9) UNSIGNED NOT NULL,
3   `DateFiled` DATE NOT NULL,
4   `Description` VARCHAR(200) NOT NULL,
5   PRIMARY KEY (`ReportNumber`)
6 )
7 COLLATE='latin1_swedish_ci'
8 ENGINE=InnoDB
9 ;
10

```

Columns: Add Remove Up Down

#	Name	Datatype	Length/Set	Unsign...	Allow N...	Zerofill	Default	Comment	Collation	Expression	Virtuality
1	ReportNumber	INT	9	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No default				
2	DateFiled	DATE		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No default				
3	Description	VARCHAR	200	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No default				

Help Discard Save

```

181 SHOW CREATE TABLE `Project3`.`PoliceDepartment`;
182 SHOW CREATE TABLE `Project3`.`PoliceOfficer`;
183 SHOW CREATE TABLE `Project3`.`StatusUpdate`;
184 SHOW CREATE TABLE `Project3`.`Statute`;
185 SHOW CREATE TABLE `Project3`.`CrimeReport`;

```

Connected: 00:50 h MariaDB 10.1.17 Uptime: 3 days, 05:56 h Idle

Unamed-1\Project3\Statute\ - HeidiSQL 9.3.0.4984

File Edit Search Tools Help

Database filter Table filter

Host: 127.0.0.1 Database: Project3 Table: Statute Data Query\*

Basic Options Indexes Foreign keys Partitions CREATE code ALTER code

```

1 CREATE TABLE `Statute` (
2   `CodeDesignation` VARCHAR(12) NOT NULL,
3   `ElementsOfCrime` INT(10) UNSIGNED NOT NULL,
4   PRIMARY KEY (`CodeDesignation`)
5 )
6 COLLATE='latin1_swedish_ci'
7 ENGINE=InnoDB
8 ;
9

```

Columns: Add Remove Up Down

#	Name	Datatype	Length/Set	Unsign...	Allow N...	Zerofill	Default	Comment	Collation	Expression	Virtuality
1	CodeDesignat...	VARCHAR	12	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No default				
2	ElementsOfCri...	INT	10	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No default				

Help Discard Save

```

190 SHOW CREATE TABLE `Project3`.`PoliceDepartment`;
191 SHOW CREATE TABLE `Project3`.`PoliceOfficer`;
192 SHOW CREATE TABLE `Project3`.`ReportedThrough`;
193 SHOW CREATE TABLE `Project3`.`StatusUpdate`;
194 SHOW CREATE TABLE `Project3`.`Statute`;

```

Connected: 00:52 h MariaDB 10.1.17 Uptime: 3 days, 05:58 h Idle.

Unamed-1\Project3>StatusUpdate\ - HeidiSQL 9.3.0.4984

File Edit Search Tools Help

Database filter Table filter

Host: 127.0.0.1 Database: Project3 Table: StatusUpdate Data Query\*

Basic Options Indexes Foreign keys Partitions CREATE code ALTER code

```

1 CREATE TABLE `StatusUpdate` (
2   `Stat_ReportNumber` INT(9) UNSIGNED NOT NULL,
3   `RevisionNumber` TINYINT(3) UNSIGNED NOT NULL,
4   `DateRevised` DATE NOT NULL,
5   `Status` TINYINT(1) UNSIGNED NOT NULL,
6   PRIMARY KEY (`Stat_ReportNumber`, `RevisionNumber`),
7   CONSTRAINT `StatusUpdate_ibfk_1` FOREIGN KEY (`Stat_ReportNumber`) REFERENCES `CrimeReport` (`ReportNumber`)
8 )
9 COLLATE='latin1_swedish_ci'
10 ENGINE=InnoDB
11 ;
12

```

Columns: Add Remove Up Down

#	Name	Datatype	Length/Set	Unsign...	Allow N...	Zerofill	Default	Comment	Collation	Expression	Virtuality
1	Stat_ReportN...	INT	9	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No default				
2	RevisionNum...	TINYINT	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No default				
3	DateRevised	DATE		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No default				
4	Status	TINYINT	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No default				

Help Discard Save

```

189 SHOW CREATE TABLE `Project3`.`MemberOf`;
190 SHOW CREATE TABLE `Project3`.`PoliceDepartment`;
191 SHOW CREATE TABLE `Project3`.`PoliceOfficer`;
192 SHOW CREATE TABLE `Project3`.`ReportedThrough`;
193 SHOW CREATE TABLE `Project3`.`StatusUpdate`;

```

Connected: 00:52 h MariaDB 10.1.17 Uptime: 3 days, 05:58 h Idle.

Unamed-1\Project3\ReportedThrough\ - HeidiSQL 9.3.0.4984

File Edit Search Tools Help

Host: 127.0.0.1 Database: Project3 Table: ReportedThrough Data Query\*

Database filter Table filter

Unamed-1

- LA\_Crime\_Reporting
  - Project3 224.0 KiB
    - CrimeReport 16.0 KiB
    - CriminalIncident 16.0 KiB
    - DefinedBy 32.0 KiB
    - FiledBy 32.0 KiB
    - MemberOf 32.0 KiB
    - PoliceDepartment 16.0 KiB
    - PoliceOfficer 16.0 KiB
    - ReportedThrough 32.0 KiB
    - StatusUpdate 16.0 KiB
    - Statute 16.0 KiB
  - cs434Proj3Test 192.0 KiB
  - information\_schema
  - mysql
  - performance\_schema

Basic Options Indexes Foreign keys Partitions CREATE code ALTER code

```

1 CREATE TABLE `ReportedThrough` (
2   `Rep_ReportNumber` INT(9) UNSIGNED NOT NULL,
3   `Rep_IncidentNumber` INT(9) UNSIGNED NOT NULL,
4   PRIMARY KEY (`Rep_ReportNumber`),
5   INDEX `Rep_IncidentNumber` (`Rep_IncidentNumber`),
6   CONSTRAINT `ReportedThrough_ibfk_1` FOREIGN KEY (`Rep_ReportNumber`) REFERENCES `CrimeReport` (`ReportNumber`),
7   CONSTRAINT `ReportedThrough_ibfk_2` FOREIGN KEY (`Rep_IncidentNumber`) REFERENCES `CriminalIncident` (`IncidentNumber`)
8 )
9 COLLATE='latin1_swedish_ci'
10 ENGINE=InnoDB
11 ;
12

```

Columns: Add Remove Up Down

#	Name	Datatype	Length/Set	Unsign...	Allow N...	Zerofill	Default	Comment	Collation	Expression	Virtuality
1	Rep_ReportN...	INT	9	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No default				
2	Rep_IncidentN...	INT	9	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No default				

Help Discard Save

```

188 SHOW CREATE TABLE `Project3`.`FiledBy`;
189 SHOW CREATE TABLE `Project3`.`MemberOf`;
190 SHOW CREATE TABLE `Project3`.`PoliceDepartment`;
191 SHOW CREATE TABLE `Project3`.`PoliceOfficer`;
192 SHOW CREATE TABLE `Project3`.`ReportedThrough`;

```

Connected: 00:51 h MariaDB 10.1.17 Uptime: 3 days, 05:58 h Idle.

---

Unamed-1\Project3\PoliceOfficer\ - HeidiSQL 9.3.0.4984

File Edit Search Tools Help

Host: 127.0.0.1 Database: Project3 Table: PoliceOfficer Data Query\*

Database filter Table filter

Unamed-1

- LA\_Crime\_Reporting
  - Project3 224.0 KiB
    - CrimeReport 16.0 KiB
    - CriminalIncident 16.0 KiB
    - DefinedBy 32.0 KiB
    - FiledBy 32.0 KiB
    - MemberOf 32.0 KiB
    - PoliceDepartment 16.0 KiB
    - PoliceOfficer 16.0 KiB
    - ReportedThrough 32.0 KiB
    - StatusUpdate 16.0 KiB
    - Statute 16.0 KiB
  - cs434Proj3Test 192.0 KiB
  - information\_schema
  - mysql
  - performance\_schema

Basic Options Indexes Foreign keys Partitions CREATE code ALTER code

```

1 CREATE TABLE `PoliceOfficer` (
2   `DateGraduated` DATE NOT NULL,
3   `BadgeNumber` SMALLINT(5) UNSIGNED NOT NULL,
4   `LastName` VARCHAR(25) NOT NULL,
5   `FirstName` VARCHAR(25) NOT NULL,
6   PRIMARY KEY (`DateGraduated`, `BadgeNumber`)
7 )
8 COLLATE='latin1_swedish_ci'
9 ENGINE=InnoDB
10 ;
11

```

Columns: Add Remove Up Down

#	Name	Datatype	Length/Set	Unsign...	Allow N...	Zerofill	Default	Comment	Collation	Expression	Virtuality
1	DateGraduated	DATE		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No default				
2	BadgeNumber	SMALLINT	5	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No default				
3	LastName	VARCHAR	25	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No default				
4	FirstName	VARCHAR	25	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No default				

Help Discard Save

```

187 SHOW CREATE TABLE `Project3`.`DefinedBy`;
188 SHOW CREATE TABLE `Project3`.`FiledBy`;
189 SHOW CREATE TABLE `Project3`.`MemberOf`;
190 SHOW CREATE TABLE `Project3`.`PoliceDepartment`;
191 SHOW CREATE TABLE `Project3`.`PoliceOfficer`;

```

Connected: 00:51 h MariaDB 10.1.17 Uptime: 3 days, 05:58 h Idle.

## MySQL Create and Insert Command Statements:

;

CREATE TABLE IF NOT EXISTS Statute(

CodeDesignation VARCHAR(12) NOT NULL,

ElementsOfCrime INT UNSIGNED NOT NULL,

CONSTRAINT 'pk\_code' PRIMARY KEY(CodeDesignation) NOT DEFERRABLE) ENGINE = InnoDB;

CREATE TABLE IF NOT EXISTS Statute( CodeDesignation VARCHAR(12) NOT NULL, ElementsOfCrime INT UNSIGNED NOT NULL, CONSTRAINT 'pk\_code' PRIMARY KEY(CodeDesignation) NOT DEFERRABLE) ENGINE = InnoDB;

CREATE TABLE IF NOT EXISTS Statute( CodeDesignation VARCHAR(12) NOT NULL, ElementsOfCrime INT UNSIGNED NOT NULL, CONSTRAINT 'pk\_code' PRIMARY KEY(CodeDesignation) NOT DEFERRABLE);

;

CREATE TABLE IF NOT EXISTS Statute(

CodeDesignation VARCHAR(12) NOT NULL,

ElementsOfCrime INT UNSIGNED NOT NULL,

CONSTRAINT pk\_code PRIMARY KEY(CodeDesignation) NOT DEFERRABLE INITIALLY IMMEDIATE

) Engine=InnoDB;

CREATE TABLE IF NOT EXISTS Statute( CodeDesignation VARCHAR(12) NOT NULL, ElementsOfCrime INT UNSIGNED NOT NULL, CONSTRAINT pk\_code PRIMARY KEY(CodeDesignation) NOT DEFERRABLE INITIALLY IMMEDIATE ) Engine=InnoDB;

CREATE TABLE IF NOT EXISTS Statute( CodeDesignation VARCHAR(12) NOT NULL, ElementsOfCrime INT UNSIGNED NOT NULL, CONSTRAINT pk\_code PRIMARY KEY(CodeDesignation) NOT DEFERRABLE INITIALLY IMMEDIATE) Engine=InnoDB;

CREATE TABLE IF NOT EXISTS Statute( CodeDesignation VARCHAR(12) NOT NULL, ElementsOfCrime INT UNSIGNED NOT NULL, CONSTRAINT pk\_code PRIMARY KEY CodeDesignation NOT DEFERRABLE INITIALLY IMMEDIATE) Engine=InnoDB;

CREATE TABLE IF NOT EXISTS Statute (Code Designation VARCHAR(12) NOT NULL, ElementsOfCrime INT UNSIGNED NOT NULL, CONSTRAINT pk\_code PRIMARY KEY (Code Designation) NOT DEFERRABLE INITIALLY IMMEDIATE) Engine = InnoDB;

CREATE TABLE IF NOT EXISTS Statute (Code Designation VARCHAR(12) NOT NULL, ElementsOfCrime INT UNSIGNED NOT NULL, PRIMARY KEY (CodeDesignation) NOT DEFERRABLE) ENGINE = InnoDB;

CREATE TABLE IF NOT EXISTS Statute (Code Designation VARCHAR(12) NOT NULL, ElementsOfCrime INT UNSIGNED NOT NULL, PRIMARY KEY (CodeDesignation)) ENGINE = InnoDB;

;

CREATE TABLE IF NOT EXISTS Statute (CodeDesignation VARCHAR(12) NOT NULL) ENGINE=InnoDB;

drop table Statute;

CREATE TABLE IF NOT EXISTS Statute (CodeDesignation VARCHAR(12) NOT NULL, ElementsOfCrime INT UNSIGNED NOT NULL, PRIMARY KEY (CodeDesignation)) Engine=InnoDB;

drop Statute;

CREATE TABLE IF NOT EXISTS Statute (CodeDesignation VARCHAR(12) NOT NULL, ElementsOfCrime INT UNSIGNED NOT NULL, PRIMARY KEY (CodeDesignation) NOT DEFERRABLE) Engine=InnoDB;

;

drop Statute;

drop table Statute;

CREATE TABLE IF NOT EXISTS Statute (CodeDeignation VARCHAR(12) NOT NULL, ElementsOfCrime INT UNSIGNED NOT NULL, PRIMARY KEY CodeDesignation NOT DEFERRABLE) ENGINE = InnoDB;

CREATE TABLE IF NOT EXISTS Statute (CodeDeignation VARCHAR(12) NOT NULL, ElementsOfCrime INT UNSIGNED NOT NULL, PRIMARY KEY CodeDesignation NOT DEFERRABLE);

CREATE TABLE IF NOT EXISTS Statute (CodeDeignation VARCHAR(12) NOT NULL, ElementsOfCrime INT UNSIGNED NOT NULL, PRIMARY KEY CodeDesignation DEFERRABLE);

CREATE TABLE Statute (CodeDesignation VARCHAR(12) NOT NULL, ElementsOfCrime INT UNSIGNED NOT NULL, PRIMARY KEY CodeDesignation) ENGINE = InnoDB;

CREATE TABLE Statute (CodeDesignation VARCHAR(12) NOT NULL, ElementsOfCrime INT UNSIGNED NOT NULL, PRIMARY KEY (CodeDesignation)) ENGINE = InnoDB;

CREATE TABLE Statute (CodeDesignation VARCHAR(12) NOT NULL, ElementsOfCrime INT UNSIGNED NOT NULL, PRIMARY KEY (CodeDesignation) NOT DEFERRABLE) ENGINE = InnoDB;

CREATE TABLE Statute (CodeDesignation VARCHAR(12) NOT NULL, ElementsOfCrime INT UNSIGNED NOT NULL, PRIMARY KEY (CodeDesignation) DEFERRABLE) ENGINE = InnoDB;

CREATE TABLE Statute (CodeDesignation VARCHAR(12) NOT NULL, ElementsOfCrime INT UNSIGNED NOT NULL, CONSTRAINT 'pk\_codedes' PRIMARY KEY (CodeDesignation) DEFERRABLE) ENGINE = InnoDB;

CREATE TABLE Statute (CodeDesignation VARCHAR(12) NOT NULL, ElementsOfCrime INT UNSIGNED NOT NULL, CONSTRAINT 'pk\_codedes' PRIMARY KEY (CodeDesignation)) ENGINE = InnoDB;

CREATE TABLE Statute (CodeDesignation VARCHAR(12) NOT NULL, ElementsOfCrime INT UNSIGNED NOT NULL, PRIMARY KEY (CodeDesignation)) ENGINE = InnoDB;

;

;

;

CREATE TABLE Statute (CodeDesignation VARCHAR(12) NOT NULL, ElementsOfCrime INT UNSIGNED NOT NULL, CONSTRAINT `pk\_code` PRIMARY KEY (CodeDesignation) NOT DEFERRABLE) ENGINE = InnoDB;

CREATE TABLE Statute (CodeDesignation VARCHAR(12) NOT NULL, ElementsOfCrime INT UNSIGNED NOT NULL, PRIMARY KEY (CodeDesignation)); ENGINE = InnoDB;

;

drop table Statute;

CREATE TABLE Statute(CodeDesignation VARCHAR(12) NOT NULL, ElementsOfCrime INT UNSIGNED NOT NULL, PRIMARY KEY (CodeDesignation)) ENGINE = InnoDB;

CREATE TABLE CriminalIncident(IncidentNumber INT(9) UNSIGNED NOT NULL, TimeOccurred SMALLINT(4) UNSIGNED NOT NULL, DateOccurred DATE NOT NULL, Address VARCHAR(50) NOT NULL, PRIMARY KEY(IncidentNumber) Engine = InnoDB;

CREATE TABLE CriminalIncident ( IncidentNumber INT(9) UNSIGNED NOT NULL, TimeOccurred SMALLINT(4) UNSIGNED NOT NULL, DateOccurred DATE NOT NULL, Address VARCHAR(50) NOT NULL, PRIMARY KEY(IncidentNumber)) Engine = InnoDB;

CREATE TABLE DefinedBy(Def\_IncidentNumber INT(9) UNSIGNED NOT NULL, Def\_CodeDesignation VARCHAR(12) NOT NULL, PRIMARY KEY (Def\_IncidentNumber), FOREIGN KEY (Def\_IncidentNumber) REFERENCES CriminalIncident(IncidentNumber), FOREIGN KEY (Def\_CodeDesignation) REFERENCES Statute(CodeDesignation) ENGINE = InnoDB;

CREATE TABLE DefinedBy(Def\_IncidentNumber INT(9) UNSIGNED NOT NULL, Def\_CodeDesignation VARCHAR(12) NOT NULL, PRIMARY KEY (Def\_IncidentNumber), FOREIGN KEY (Def\_IncidentNumber) REFERENCES CriminalIncident(IncidentNumber), FOREIGN KEY (Def\_CodeDesignation) REFERENCES Statute(CodeDesignation)) ENGINE = InnoDB;

CREATE TABLE CrimeReport( ReportNumber INT(9) UNSIGNED NOT NULL, DateFiled DATE NOT NULL, Description VARCHAR(200) NOT NULL, PRIMARY KEY (ReportNumber)) ENGINE = InnoDB;

CREATE TABLE ReportedThrough( Rep\_ReportNumber INT(9) UNSIGNED NOT NULL, Rep\_IncidentNumber INT(9) UNSIGNED NOT NULL, PRIMARY KEY (Rep\_ReportNumber), FOREIGN KEY (Rep\_ReportNumber) REFERENCES CrimeReport(ReportNumber), FOREIGN KEY (Rep\_IncidentNumber) REFERENCES CriminalIncident(IncidentNumber)) ENGINE = InnoDB;

CREATE TABLE StatusUpdate( Stat\_ReportNumber INT(9) UNSIGNED NOT NULL, RevisionNumber TINYINT UNSIGNED NOT NULL, DateRevised DATE NOT NULL, Status TINYINT(1) UNSIGNED NOT NULL, PRIMARY KEY (Stat\_ReportNumber, RevisionNumber), FOREIGN KEY (Stat\_ReportNumber) REFERENCES CrimeReport(ReportNumber)) ENGINE = InnoDB;

CREATE TABLE PoliceOfficer (DateGraduated DATE NOT NULL, BadgeNumber SMALLINT(5) UNSIGNED NOT NULL, LastName VARCHAR(25) NOT NULL, FirstName VARCHAR(25) NOT NULL, PRIMARY KEY (DateGraduated, BadgeNumber)) ENGINE = InnoDB;

CREATE TABLE FiledBy (File\_DateGraduated DATE NOT NULL, File\_BadgeNumber SMALLINT(5) UNSIGNED NOT NULL, File\_ReportNumber INT NOT NULL, PRIMARY KEY (File\_DateGraduated, File\_BadgeNumber), FOREIGN KEY (File\_DateGraduated, File\_BadgeNumber) REFERENCES PoliceOfficer(DateGraduated, BadgeNumber), FOREIGN KEY (File\_ReportNumber) REFERENCES CrimeReport(ReportNumber)) ENGINE = InnoDB;

CREATE TABLE FiledBy (File\_DateGraduated DATE NOT NULL, File\_BadgeNumber SMALLINT(5) UNSIGNED NOT NULL, File\_ReportNumber INT NOT NULL, PRIMARY KEY (File\_DateGraduated,

```
File_BadgeNumber), FOREIGN KEY (File_DateGraduated, File_BadgeNumber) REFERENCES  
PoliceOfficer(DateGraduated, BadgeNumber), FOREIGN KEY (File_ReportNumber) REFERENCES  
CrimeReport (ReportNumber)) ENGINE = InnoDB;
```

```
;
```

```
describe FiledBy
```

```
;
```

```
show create table FiledBy;
```

```
show create table DescribedIn;
```

```
;
```

```
show create table definedby;
```

```
show create table DefinedBy;
```

```
;
```

```
CREATE TABLE FiledBy ( File_DateGraduated DATE NOT NULL, File_BadgeNumber SMALLINT(5)  
UNSIGNED NOT NULL, File_ReportNumber INT(9) NOT NULL, PRIMARY KEY (File_DateGraduated,  
File_BadgeNumber), FOREIGN KEY (File_DateGraduated, File_BadgeNumber) REFERENCES PoliceOfficer  
(DateGraduated, BadgeNumber), FOREIGN KEY (File_ReportNumber) REFERENCES CrimeReport  
(ReportNumber)) ENGINE = InnoDB;
```

```
CREATE TABLE FiledBy ( File_DateGraduated DATE NOT NULL, File_BadgeNumber SMALLINT(5)  
UNSIGNED NOT NULL, File_ReportNumber INT(9) UNSIGNED NOT NULL, PRIMARY KEY  
(File_DateGraduated, File_BadgeNumber), FOREIGN KEY (File_DateGraduated, File_BadgeNumber)  
REFERENCES PoliceOfficer (DateGraduated, BadgeNumber), FOREIGN KEY (File_ReportNumber)  
REFERENCES CrimeReport (ReportNumber)) ENGINE = InnoDB;
```

```
;
```

```
CREATE TABLE PoliceDepartment ( PrecinctNumber TINYINT(2) UNSIGNED NOT NULL, Jurisdiction  
VARCHAR(50) NOT NULL, PRIMARY KEY (PrecinctNumber)) ENGINE = InnoDB;
```

```
CREATE TABLE MemberOf ( Mem_DateGraduated DATE NOT NULL, Mem_BadgeNumber SMALLINT(5)  
UNSIGNED NOT NULL, Mem_PrecinctNumber TINYINT (2) UNSIGNED NOT NULL, PRIMARY KEY  
(Mem_DateGraduated, Mem_BadgeNumber), FOREIGN KEY (Mem_DateGraduated,  
Mem_BadgeNumber) REFERENCES PoliceOfficer (DateGraduated, BadgeNumber), FOREIGN KEY  
(Mem_PrecinctNumber) REFERENCES PoliceDepartment (PrecinctNumber)) ENGINE = InnoDB;
```

```
CREATE TABLE MemberOf ( Mem_DateGraduated DATE NOT NULL, Mem_BadgeNumber SMALLINT(5)  
UNSIGNED NOT NULL, Mem_PrecinctNumber TINYINT (2) UNSIGNED NOT NULL, PRIMARY KEY  
(Mem_DateGraduated, Mem_BadgeNumber), FOREIGN KEY (Mem_DateGraduated,  
Mem_BadgeNumber) REFERENCES PoliceOfficer (DateGraduated, BadgeNumber), FOREIGN KEY  
(Mem_PrecinctNumber) REFERENCES PoliceDepartment (PrecinctNumber)) ENGINE = InnoDB;
```



;

;

```
INSERT INTO Statute (CodeDesignation, ElementsOfCrime) VALUES ('PEN-102', 1003813), ('PEN-211', 120038), ('PEN-240', 5164921), ('PEN-187', 6839), ('PEN-404', 583860);
```

```
INSERT INTO PoliceOfficer (DateGraduated, BadgeNumber, LastName, FirstName) VALUES ('2002-10-18', 12001, 'Hershey', 'John'), ('1999-02-27', 9942, 'Jijekjesh', 'Ryan'), ('1983-07-22', 76, 'Cornish', 'Eleanor'), ('1992-03-13', 406, 'Brown', 'Susan'), ('1977-09-11', 22, 'Davis', 'Miles');
```

```
INSERT INTO PoliceDepartment (PrecinctNumber, Jurisdiction) VALUES (1, 'Central Area'), (2, 'Rampart Area'), (3, 'Southwest Area'), (4, 'HollenBeck Area'), (5, 'Harbor Area');
```

```
INSERT INTO DefinedBy (Def_IncidentNumber, Def_CodeDesignation) VALUES (132007717, 'PEN-187'), (130608787, 'PEN-187'), (131820260, 'PEN-404'), (131817514, 'PEN-404'), (130510483, 'PEN-211');
```

```
show table PoliceOfficer;
```

```
show PoliceOfficer;
```

```
select * from PoliceOfficer;
```

```
select * from MemberOf;
```

```
select * from PoliceDepartment;
```

```
INSERT INTO DefinedBy (Def_IncidentNumber, Def_CodeDesignation) VALUES (132007717, 'PEN-187'), (130608787, 'PEN-187'), (131820260, 'PEN-404'), (131817514, 'PEN-404'), (130510483, 'PEN-211');
```

```
select * from DefinedBy;
```

;

```
select * from CriminalIncident;
```

```
select * from PoliceOfficer;
```

```
INSERT INTO CriminalIncident (IncidentNumber, TimeOccurred, DateOccurred, Address) VALUES (132007717, 2015, '2013-03-20', 'Oxford'), (130608787, 445, '2013-03-10', 'Odin Street'), (131820260, 745, '2013-12-18', '105th Street'), (131817514, 1730, '2013-10-18', '101st Street'), (130510483, 2000, '2013-05-25', 'WestSepulveda Boulevard');
```

```
INSERT INTO DefinedBy (Def_IncidentNumber, Def_CodeDesignation) VALUES (132007717, 'PEN-187'), (130608787, 'PEN-187'), (131820260, 'PEN-404'), (131817514, 'PEN-404'), (130510483, 'PEN-211');
```

```
select * from ReportedThrough;
```

```
INSERT INTO ReportedThrough (Rep_ReportNumber, Rep_IncidentNumber) VALUES (132007717, 132007717), (130608787, 130608787), (131820260, 131820260), (131817514, 131817514), (130510483, 130510483);
```

;

;

```
INSERT INTO CrimeReport (ReportNumber, DateFiled, Description) VALUES (132007717, '2013-03-20', 'TRAFFIC DR # EXPIRED'), (130608787, '2013-03-10', 'TRAFFIC DR # EXPIRED'), (131820260, '2013-12-18', 'TRAFFIC DR # EXPIRED'), (131817514, '2013-10-18', 'TRAFFIC DR # EXPIRED'), (130510483, '2013-05-26', 'PLAIN THEFT UNDER $400. MISSING PURSE.');
```

```
INSERT INTO ReportedThrough (Rep_ReportNumber, Rep_IncidentNumber) VALUES (132007717, 132007717), (130608787, 130608787), (131820260, 131820260), (131817514, 131817514), (130510483, 130510483);
```

```
INSERT INTO StatusUpdate (Stat_ReportNumber, RevisionNumber, DateRevised, Status) VALUES (132007717, 1, '2013-03-20', 1), (130510483, 1, '2013-05-26', 2), (130510483, 2, '2013-07-13', 3), (131817514, 1, '2013-10-18', 2), (131817514, '2013-10-18', 3);
```

```
INSERT INTO StatusUpdate (Stat_ReportNumber, RevisionNumber, DateRevised, Status) VALUES (132007717, 1, '2013-03-20', 1), (130510483, 1, '2013-05-26', 2), (130510483, 2, '2013-07-13', 3), (131817514, 1, '2013-10-18', 2), (131817514, 2, '2013-10-18', 3);
```

```
select * from PoliceOfficer;
```

```
INSERT INTO FiledBy (File_DateGraduated, File_BadgeNumber, File_ReportNumber) VALUES ('1977-09-11', 22, 132007717), ('1999-02-27', 9942, 132007717), ('1992-03-13', 406, 130510483), ('1983-07-22', 76, 130510483), ('1977-09-11', 22, 131817514);
```

;

,

;

```
INSERT INTO FiledBy (File_DateGraduated, File_BadgeNumber, File_ReportNumber) VALUES ('1977-09-11', 22, 132007717), ('1999-02-27', 9942, 132007717), ('1992-03-13', 406, 130510483), ('1983-07-22', 76, 130510483), ('1977-09-11', 22, 131817514);\012;\012\012';
```

```
INSERT INTO FiledBy (File_DateGraduated, File_BadgeNumber, File_ReportNumber) VALUES ('1977-09-11', 22, 132007717), ('1999-02-27', 9942, 132007717), ('1992-03-13', 406, 130510483), ('1983-07-22', 76, 130510483), ('1977-09-11', 22, 131817514);
```

```
select * from FiledBy;
```

```
INSERT INTO FiledBy (File_DateGraduated, File_BadgeNumber, File_ReportNumber) VALUES ('1977-09-11', 22, 132007717), ('1999-02-27', 9942, 132007717), ('1992-03-13', 406, 130510483), ('1983-07-22', 76, 130510483), ('2002-10-18', 12001, 131817514);
```

```
INSERT INTO MemberOf (Mem_DateGraduated, Mem_BadgeNumber, Mem_PrecinctNumber) VALUES ('1977-09-11', 22, 1), ('1999-02-27', 9942, 2), ('2002-10-18', 12001, 1), ('1983-07-22', 76, 1), ('1992-03-13', 406, 2);
```

### Create Command Statements:

```
CREATE TABLE `CrimeReport` (  
  `ReportNumber` INT(9) UNSIGNED NOT NULL,  
  `DateFiled` DATE NOT NULL,  
  `Description` VARCHAR(200) NOT NULL,  
  PRIMARY KEY (`ReportNumber`)  
)  
COLLATE='latin1_swedish_ci'  
ENGINE=InnoDB  
;
```

```
CREATE TABLE `CriminalIncident` (  
  `IncidentNumber` INT(9) UNSIGNED NOT NULL,  
  `TimeOccurred` SMALLINT(4) UNSIGNED NOT NULL,  
  `DateOccurred` DATE NOT NULL,  
  `Address` VARCHAR(50) NOT NULL,  
  PRIMARY KEY (`IncidentNumber`)  
)  
COLLATE='latin1_swedish_ci'  
ENGINE=InnoDB  
;
```

```
CREATE TABLE `DefinedBy` (  
  `Def_IncidentNumber` INT(9) UNSIGNED NOT NULL,  
  `Def_CodeDesignation` VARCHAR(12) NOT NULL,  
  PRIMARY KEY (`Def_IncidentNumber`),  
  INDEX `Def_CodeDesignation` (`Def_CodeDesignation`),  
  CONSTRAINT `DefinedBy_ibfk_1` FOREIGN KEY (`Def_IncidentNumber`) REFERENCES  
  `CriminalIncident` (`IncidentNumber`),  
  CONSTRAINT `DefinedBy_ibfk_2` FOREIGN KEY (`Def_CodeDesignation`) REFERENCES  
  `Statute` (`CodeDesignation`)  
)  
COLLATE='latin1_swedish_ci'  
ENGINE=InnoDB  
;
```

```
CREATE TABLE `FiledBy` (  
  `File_DateGraduated` DATE NOT NULL,  
  `File_BadgeNumber` SMALLINT(5) UNSIGNED NOT NULL,  
  `File_ReportNumber` INT(9) UNSIGNED NOT NULL,  
  PRIMARY KEY (`File_DateGraduated`, `File_BadgeNumber`),  
  INDEX `File_ReportNumber` (`File_ReportNumber`),  
  CONSTRAINT `FiledBy_ibfk_1` FOREIGN KEY (`File_DateGraduated`,  
  `File_BadgeNumber`) REFERENCES `PoliceOfficer` (`DateGraduated`,  
  `BadgeNumber`),  
  CONSTRAINT `FiledBy_ibfk_2` FOREIGN KEY (`File_ReportNumber`) REFERENCES  
  `CrimeReport` (`ReportNumber`)  
)  
COLLATE='latin1_swedish_ci'  
ENGINE=InnoDB  
;
```

```
CREATE TABLE `MemberOf` (  
  `Mem_DateGraduated` DATE NOT NULL,  
  `Mem_BadgeNumber` SMALLINT(5) UNSIGNED NOT NULL,
```

```

`Mem_PrecinctNumber` TINYINT(2) UNSIGNED NOT NULL,
PRIMARY KEY (`Mem_DateGraduated`, `Mem_BadgeNumber`),
INDEX `Mem_PrecinctNumber` (`Mem_PrecinctNumber`),
CONSTRAINT `MemberOf_ibfk_1` FOREIGN KEY (`Mem_DateGraduated`,
`Mem_BadgeNumber`) REFERENCES `PoliceOfficer` (`DateGraduated`,
`BadgeNumber`),
CONSTRAINT `MemberOf_ibfk_2` FOREIGN KEY (`Mem_PrecinctNumber`) REFERENCES
`PoliceDepartment` (`PrecinctNumber`)
)
COLLATE='latin1_swedish_ci'
ENGINE=InnoDB
;

```

```

CREATE TABLE `PoliceDepartment` (
`PrecinctNumber` TINYINT(2) UNSIGNED NOT NULL,
`Jurisdiction` VARCHAR(50) NOT NULL,
PRIMARY KEY (`PrecinctNumber`)
)
COLLATE='latin1_swedish_ci'
ENGINE=InnoDB
;

```

```

CREATE TABLE `PoliceOfficer` (
`DateGraduated` DATE NOT NULL,
`BadgeNumber` SMALLINT(5) UNSIGNED NOT NULL,
`LastName` VARCHAR(25) NOT NULL,
`FirstName` VARCHAR(25) NOT NULL,
PRIMARY KEY (`DateGraduated`, `BadgeNumber`)
)
COLLATE='latin1_swedish_ci'
ENGINE=InnoDB
;

```

```

CREATE TABLE `ReportedThrough` (
`Rep_ReportNumber` INT(9) UNSIGNED NOT NULL,
`Rep_IncidentNumber` INT(9) UNSIGNED NOT NULL,
PRIMARY KEY (`Rep_ReportNumber`),
INDEX `Rep_IncidentNumber` (`Rep_IncidentNumber`),
CONSTRAINT `ReportedThrough_ibfk_1` FOREIGN KEY (`Rep_ReportNumber`)
REFERENCES `CrimeReport` (`ReportNumber`),
CONSTRAINT `ReportedThrough_ibfk_2` FOREIGN KEY (`Rep_IncidentNumber`)
REFERENCES `CriminalIncident` (`IncidentNumber`)
)
COLLATE='latin1_swedish_ci'
ENGINE=InnoDB
;

```

```

CREATE TABLE `StatusUpdate` (
`Stat_ReportNumber` INT(9) UNSIGNED NOT NULL,
`RevisionNumber` TINYINT(3) UNSIGNED NOT NULL,
`DateRevised` DATE NOT NULL,
`Status` TINYINT(1) UNSIGNED NOT NULL,
PRIMARY KEY (`Stat_ReportNumber`, `RevisionNumber`),
CONSTRAINT `StatusUpdate_ibfk_1` FOREIGN KEY (`Stat_ReportNumber`) REFERENCES
`CrimeReport` (`ReportNumber`)
)
COLLATE='latin1_swedish_ci'

```

```
ENGINE=InnoDB
;

CREATE TABLE `Statute` (
  `CodeDesignation` VARCHAR(12) NOT NULL,
  `ElementsOfCrime` INT(10) UNSIGNED NOT NULL,
  PRIMARY KEY (`CodeDesignation`)
)
COLLATE='latin1_swedish_ci'
ENGINE=InnoDB
;
```

---Table Creation---

```
CREATE TABLE IF NOT EXISTS Statute(
    CodeDesignation VARCHAR(12) NOT NULL,
    ElementsOfCrime INT UNSIGNED NOT NULL,
    PRIMARY KEY (CodeDesignation)
) ENGINE = InnoDB;
```

```
CREATE TABLE IF NOT EXISTS CriminalIncident(
    IncidentNumber INT(9) UNSIGNED NOT NULL,
    TimeOccurred SMALLINT(4) UNSIGNED NOT NULL,
    DateOccurred DATE NOT NULL,
    Address VARCHAR(50) NOT NULL,
    PRIMARY KEY (IncidentNumber)
) ENGINE = InnoDB;
```

```
CREATE TABLE IF NOT EXISTS DefinedBy(
    Def_IncidentNumber INT(9) UNSIGNED NOT NULL,
    Def_CodeDesignation VARCHAR(12) NOT NULL,
    PRIMARY KEY (Def_IncidentNumber),
    FOREIGN KEY (Def_IncidentNumber) REFERENCES CriminalIncident(IncidentNumber),
    FOREIGN KEY (Def_CodeDesignation) REFERENCES Statute(CodeDesignation)
```

```
) ENGINE = InnoDB;
```

```
CREATE TABLE IF NOT EXISTS CrimeReport(  
    ReportNumber INT(9) UNSIGNED NOT NULL,  
    DateFiled DATE NOT NULL,  
    Description VARCHAR(200) NOT NULL,  
    PRIMARY KEY (ReportNumber)
```

```
) ENGINE = InnoDB;
```

```
CREATE TABLE IF NOT EXISTS ReportedThrough(  
    Rep_ReportNumber INT(9) UNSIGNED NOT NULL,  
    Rep_IncidentNumber INT(9) UNSIGNED NOT NULL,  
    PRIMARY KEY (Rep_ReportNumber),  
    FOREIGN KEY (Rep_ReportNumber) REFERENCES CrimeReport(ReportNumber),  
    FOREIGN KEY (Rep_IncidentNumber) REFERENCES CriminalIncident(IncidentNumber)
```

```
) ENGINE = InnoDB;
```

```
CREATE TABLE IF NOT EXISTS StatusUpdate(  
    Stat_ReportNumber INT(9) UNSIGNED NOT NULL,  
    RevisionNumber TINYINT UNSIGNED NOT NULL,  
    DateRevised DATE NOT NULL,  
    Status TINYINT(1) UNSIGNED NOT NULL,  
    PRIMARY KEY (Stat_ReportNumber, RevisionNumber),  
    FOREIGN KEY (Stat_ReportNumber) REFERENCES CrimeReport(ReportNumber)
```

```
) ENGINE = InnoDB;
```

```
CREATE TABLE IF NOT EXISTS PoliceOfficer(  
    DateGraduated DATE NOT NULL,  
    BadgeNumber SMALLINT(5) UNSIGNED NOT NULL,
```

```
        LastName VARCHAR(25) NOT NULL,  
        FirstName VARCHAR(25) NOT NULL,  
        PRIMARY KEY (DateGraduated, BadgeNumber)  
    ) ENGINE = InnoDB;
```

```
CREATE TABLE IF NOT EXISTS FiledBy(  
    File_DateGraduated DATE NOT NULL,  
    File_BadgeNumber SMALLINT(5) UNSIGNED NOT NULL,  
    File_ReportNumber INT(9) UNSIGNED NOT NULL,  
    PRIMARY KEY (File_DateGraduated, File_BadgeNumber),  
    FOREIGN KEY (File_DateGraduated, File_BadgeNumber) REFERENCES  
PoliceOfficer(DateGraduated, BadgeNumber),  
    FOREIGN KEY (File_ReportNumber) REFERENCES CrimeReport(ReportNumber)  
    ) ENGINE = InnoDB;
```

```
CREATE TABLE IF NOT EXISTS PoliceDepartment(  
    PrecinctNumber TINYINT(2) UNSIGNED NOT NULL,  
    Jurisdiction VARCHAR(50) NOT NULL,  
    PRIMARY KEY (PrecinctNumber)  
    ) ENGINE = InnoDB;
```

```
CREATE TABLE IF NOT EXISTS MemberOf(  
    Mem_DateGraduated DATE NOT NULL,  
    Mem_BadgeNumber SMALLINT(5) UNSIGNED NOT NULL,  
    Mem_PrecinctNumber TINYINT(2) UNSIGNED NOT NULL,  
    PRIMARY KEY (Mem_DateGraduated, Mem_BadgeNumber),  
    FOREIGN KEY (Mem_DateGraduated, Mem_BadgeNumber) REFERENCES PoliceOfficer  
(DateGraduated, BadgeNumber),  
    FOREIGN KEY (Mem_PrecinctNumber) REFERENCES PoliceDepartment(PrecinctNumber)
```

```
) ENGINE = InnoDB;
```

---SAMPLE TEST Record Insertion---

```
INSERT INTO Statute (CodeDesignation, ElementsOfCrime) VALUES ('PEN-102', 1003813), ('PEN-211',  
120038),  
('PEN-240', 5164921), ('PEN-187', 6839), ('PEN-404', 58386001);
```

```
INSERT INTO PoliceOfficer (DateGraduated, BadgeNumber, LastName, FirstName) VALUES ('2002-10-18',  
12001, 'Hershey', 'John'),  
('1999-02-27', 9942, 'Jijekjesh', 'Ryan'), ('1983-07-22', 76, 'Cornish', 'Eleanor'),  
('1992-03-13', 406, 'Brown', 'Susan'), ('1977-09-11', 22, 'Davis', 'Miles');
```

```
INSERT INTO PoliceDepartment (PrecinctNumber, Jurisdiction) VALUES (1, 'Central Area'), (2, 'Rampart  
Area'),  
(3, 'Southwest Area'), (4, 'Hollenbeck Area'), (5, 'Harbor Area');
```

```
INSERT INTO CrimeReport (ReportNumber, DateFiled, Description) VALUES(101, '2002-10-18', 'Sue  
Hollenbeck Area Test Desc1'), (11111111112, '2002-10-19', 'Bob Hollenbeck Area Test Desc2'),  
(11111111113, '2002-10-20', 'Bob Hollenbeck Area Test Desc3'), (11111111114, '2002-10-11', 'Bobby  
Hollenbeck Area Test Desc4'), (11111111115, '2009-10-19', 'Boby Hollenbeck Area Test Desc5')
```