

Code for part 1:

```
select * from Users U join Listens L on L.userName=U.name join Song S on L.songName=S.name where
U.name='Jamiya4' and S.name<='Dirty K4';
```

```
select * from Song S where dateReleased <= '1995-02-17' group by S.name ;
```

```
select A.name from Artist A, Song S, Performs P where A.name=P.artistName and S.name=P.songName
group by A.name having count(*)=4;
```

Code for part 2:

```
insert into Users values('Oscar201', 21, 'Fayetteville', 'NC', '2021-02-17');
```

```
select * from Users U where U.name='Oscar201';
```

```
update Users set age=age+1 where name='Oscar201';
```

```
select * from Users U where U.name='Oscar201';
```

```
select * from Artist A where A.age=22;
```

```
update Artist set age=age+1 where age=22;
```

```
select * from Artist A where A.age=23;
```

output for both parts:

3 queries on my PDA database with english descriptions:

1)Find all information on the songs Jamiya4 listened to that are less than or equal to Dirty K4

```
select * from Users U join Listens L on L.userName=U.name join Song S on L.songName=S.name where
U.name='Jamiya4' and S.name<='Dirty K4';
```

```
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
-----+-----+
```

```
| name | age | city | state | dateJoined | userName | songName | numListens | name | genre
| dateReleased | isExplicit | numListens |
```

```
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
-----+-----+
```

```
| Jamiya4 | 40 | Philadelphia | PA | 2019-07-28 | Jamiya4 | Dirty K14 | 429 | Dirty K14 | Hip-
Hop/Rap | 1997-04-08 | 1 | 169806559 |
```

Jamiya4	40	Philadelphia	PA	2019-07-28	Jamiya4	Dirty K21	419	Dirty K21	Hip-Hop/Rap	2013-05-09	1	169878402	
Jamiya4	40	Philadelphia	PA	2019-07-28	Jamiya4	Dirty K22	149	Dirty K22	Hip-Hop/Rap	2000-03-18	1	519794418	
Jamiya4	40	Philadelphia	PA	2019-07-28	Jamiya4	Dirty K23	278	Dirty K23	Hip-Hop/Rap	2011-02-10	1	156781683	
Jamiya4	40	Philadelphia	PA	2019-07-28	Jamiya4	Dirty K27	475	Dirty K27	Hip-Hop/Rap	2000-05-28	1	238949882	
Jamiya4	40	Philadelphia	PA	2019-07-28	Jamiya4	Dirty K35	4	Dirty K35	Hip-Hop/Rap	1998-04-06	1	550095282	
Jamiya4	40	Philadelphia	PA	2019-07-28	Jamiya4	Dirty K38	71	Dirty K38	Hip-Hop/Rap	2005-09-27	1	676287990	
Jamiya4	40	Philadelphia	PA	2019-07-28	Jamiya4	Dirty K4	432	Dirty K4	Hip-Hop/Rap	2012-01-10	1	416927026	

```

+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
-----+-----+

```

8 rows in set (0.0033 sec)

2)List all the infomration on all 35-year old artists in alpabetical order by home state

MySQL localhost:3306 ssl musicappdb SQL > select * from Artist A where A.age=35 group by A.state;

```

+-----+-----+-----+-----+
| name      | age | city      | state |
+-----+-----+-----+-----+
| 21 Savage94 | 35 | Atlanta   | GA    |
| MF DOOM25   | 35 | Long Island | NY    |
| Rico Nasty61 | 35 | Palmer Park | MD    |
| SZA46       | 35 | St. Louis  | MO    |
+-----+-----+-----+-----+

```

4 rows in set (0.0007 sec)

3)Find the name of all artists in alphabetical order that have performed exactly 4 songs

MySQL localhost:3306 ssl musicappdb SQL > select A.name from Artist A, Song S, Performs P where A.name=P.artistName and S.name=P.songName group by P.artistName having count(*)=4;

```
+-----+
| name      |
+-----+
| 21 Savage2 |
| J. Cole15  |
| J. Cole18  |
| J. Cole78  |
| J. Cole85  |
| MF DOOM17 |
| MF DOOM62 |
| Rico Nasty2 |
| Sade22     |
| Sade82     |
| SZA16      |
| SZA67      |
| Young Nudy15 |
```

```
+-----+
13 rows in set (0.0024 sec)
```

3 data modification commands on my PDA:

1)Simple Insert:

MySQL localhost:3306 ssl musicappdb SQL > insert into Users values('Oscar201', 21, 'Fayetteville', 'NC', '2021-02-17');

Query OK, 1 row affected (0.0017 sec)

MySQL localhost:3306 ssl musicappdb SQL > select * from Users U where U.name='Oscar201';

```

+-----+-----+-----+-----+
| name   | age | city      | state | dateJoined |
+-----+-----+-----+-----+
| Oscar201 | 21 | Fayetteville | NC   | 2021-02-17 |
+-----+-----+-----+-----+

1 row in set (0.0002 sec)

```

2)Simple Update:

MySQL localhost:3306 ssl musicappdb SQL > update Users set age=age+1 where name='Oscar201';

Query OK, 1 row affected (0.0016 sec)

Rows matched: 1 Changed: 1 Warnings: 0

MySQL localhost:3306 ssl musicappdb SQL > select * from Users U where U.name='Oscar201';

```

+-----+-----+-----+-----+
| name   | age | city      | state | dateJoined |
+-----+-----+-----+-----+
| Oscar201 | 22 | Fayetteville | NC   | 2021-02-17 |
+-----+-----+-----+-----+

1 row in set (0.0002 sec)

```

3)Update of seval tuples:

MySQL localhost:3306 ssl musicappdb SQL > select * from Artist A where A.age=22;

```

+-----+-----+-----+-----+
| name          | age | city      | state |
+-----+-----+-----+-----+
| 21 Savage60   | 22 | Atlanta   | GA    |
| 21 Savage91   | 22 | Atlanta   | GA    |
| J. Cole31     | 22 | Fayetteville | NC    |
| J. Cole64     | 22 | Fayetteville | NC    |

```

J.I.D.77	22	Atlanta	GA	
MF DOOM76	22	Long Island	NY	
MF DOOM89	22	Long Island	NY	
MF DOOM9	22	Long Island	NY	
Rico Nasty84	22	Palmer Park	MD	
Rico Nasty91	22	Palmer Park	MD	
Sade87	22	Ibadan	Nigeria	
The Isley Brothers60	22	Cincinnati	OH	
The Isley Brothers64	22	Cincinnati	OH	

+-----+-----+-----+-----+

13 rows in set (0.0004 sec)

MySQL localhost:3306 ssl musicappdb SQL > update Artist set age=age+1 where age=22;

Query OK, 13 rows affected (0.0023 sec)

Rows matched: 13 Changed: 13 Warnings: 0

MySQL localhost:3306 ssl musicappdb SQL > select * from Artist A where A.age=23;

+-----+-----+-----+-----+

name	age	city	state	
------	-----	------	-------	--

+-----+-----+-----+-----+

21 Savage60	23	Atlanta	GA	
21 Savage91	23	Atlanta	GA	
J. Cole17	23	Fayetteville	NC	
J. Cole31	23	Fayetteville	NC	
J. Cole36	23	Fayetteville	NC	
J. Cole39	23	Fayetteville	NC	
J. Cole64	23	Fayetteville	NC	
J.I.D.15	23	Atlanta	GA	
J.I.D.16	23	Atlanta	GA	
J.I.D.77	23	Atlanta	GA	

MF DOOM67	23 Long Island	NY	
MF DOOM76	23 Long Island	NY	
MF DOOM89	23 Long Island	NY	
MF DOOM9	23 Long Island	NY	
Rico Nasty14	23 Palmer Park	MD	
Rico Nasty20	23 Palmer Park	MD	
Rico Nasty41	23 Palmer Park	MD	
Rico Nasty84	23 Palmer Park	MD	
Rico Nasty91	23 Palmer Park	MD	
Sade24	23 Ibadan	Nigeria	
Sade87	23 Ibadan	Nigeria	
SZA85	23 St. Louis	MO	
SZA92	23 St. Louis	MO	
The Isley Brothers60	23 Cincinnati	OH	
The Isley Brothers64	23 Cincinnati	OH	

+-----+-----+-----+-----+

25 rows in set (0.0007 sec)