

Welcome Screen

```
Windows PowerShell
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PS C:\Users\patek\Dropbox\DB1\Phase5-JDBC> python phase5.py

-----
WELCOME TO
CHIMES MUSIC
-----

Initializing connection with Omega Oracle client.
Enter Username: |
```

Login into the Chimes Music Database

```
-----
WELCOME TO
CHIMES MUSIC
-----

Initializing connection with Omega Oracle client.
Enter Username: pxp7948
Enter Password:
Connection established...
Connection version: 19.17.0.0.0

Printing all the tables present for current user: pxp7948
FALL22_S004_10_ARTIST
FALL22_S004_10_AVAIL_SONGS
FALL22_S004_10_BUY_SONGS
FALL22_S004_10_COMPOSER
FALL22_S004_10_COMPOSES
FALL22_S004_10_CUSTOMER
FALL22_S004_10_CUSTOMER_GENRE_PREF
FALL22_S004_10_FOLLOWS
FALL22_S004_10_LIKES
FALL22_S004_10_PERSON
FALL22_S004_10_PERSON_EMAIL
FALL22_S004_10_PERSON_PHONE
FALL22_S004_10_PRODUCERS
```

Showing all the options the user can choose.

```
Windows PowerShell
Connection established...
Connection version: 19.17.0.0.0

Printing all the tables present for current user: pxp7948
FALL22_S004_10_ARTIST
FALL22_S004_10_AVAIL_SONGS
FALL22_S004_10_BUYS_RENTS
FALL22_S004_10_COMPOSER
FALL22_S004_10_COMPOSES
FALL22_S004_10_CUSTOMER
FALL22_S004_10_CUSTOMER_GENRE_PREF
FALL22_S004_10_FOLLOWS
FALL22_S004_10_LIKES
FALL22_S004_10_PERSON
FALL22_S004_10_PERSON_EMAIL
FALL22_S004_10_PERSON_PHONE
FALL22_S004_10_PRODUCERS
FALL22_S004_10_PRODUCES
FALL22_S004_10_REQUESTS
FALL22_S004_10_SINGER
FALL22_S004_10_SINGS
FALL22_S004_10_SONGS
FALL22_S004_10_UNAVAIL_SONGS

Following are the options that we can be executed from the front end interface:
Option #      Description
1             Display contents of tables
2             Modification of tables data
3             Performing Business goals from front end
4             Exit code

Enter option corresponding to the operation that you want to perform:
```

Choosing Option 1 from main menu to display table

```
Following are the options that we can be executed from the front end interface:
Option #      Description
1             Display contents of tables
2             Modification of tables data
3             Performing Business goals from front end
4             Exit code

Enter option corresponding to the operation that you want to perform: 1
Option #      Table name
1             buys_rents
2             songs
3             person
4             Back to main menu.

Enter option from above:
```

Table name option has been chosen which shows the table content

```
Windows PowerShell X + v

Following are the options that we can be executed from the front end interface:
Option #      Description
1            Display contents of tables
2            Modification of tables data
3 Performing Business goals from front end
4            Exit code

Enter option corresponding to the operation that you want to perform: 1
Option #      Table name
1            buys_rents
2            songs
3            person
4 Back to main menu.

Enter option from above: 2
SONG_ID      SONG_NAME      GENRE      REGION      RELEASE_DATE
0            1            Chamak Chalho  HipHop      1            07-20-2009
1            2            359am         Rap          2            07-14-2010
2            3            Sugar         Jazz         1            10-08-2000
3            4            Silence       RnB          2            08-31-2009
4            5            Sorry         HipHop      3            10-30-2000
5            6            Despacito     Rap          3            02-04-2009
6            7            Closure       Jazz         2            08-17-2008
7            8            Mood         RnB          1            11-25-2007
8            9            Maps         HipHop      2            02-17-2004
9            10           Apna time ayega Rap          1            07-04-2000
10           11           Like a Rolling Stone Rap          1            11-25-2008
11           12           Smells Like Teen Spirit HipHop      1            07-15-2005
12           13           A Day in the Life Jazz         3            04-24-2004
13           14           Good Vibrations HipHop      3            01-13-2006
14           15           Johnny B. Goode Jazz         3            10-21-2008
15           16           Respect       RnB          1            11-06-2005
16           17           Be My Baby    RnB          3            05-14-2005
17           18           Whats Going On Jazz         2            02-22-2004
18           19           I Heard It Through the Grapevine RnB          1            02-25-2007
19           20           (I Cant Get No) Satisfaction HipHop      2            11-07-2003
```

Choosing option 1 to update firstname and lastname from the persons table.

```
Windows PowerShell X + v

Following are the options that we can be executed from the front end interface:
Option #      Description
1            Display contents of tables
2            Modification of tables data
3 Performing Business goals from front end
4            Exit code

Enter option corresponding to the operation that you want to perform: 2
Option #      Description
1 Update name of person from Person table using fname and lname.
2            Delete song from Songs table using song_id.
3            Back to main menu.

Enter option from above: 1

Enter the name that you want to update: Hemant
Enter the last name: Bhopee

First name present in the database
Last name present in the database

Following are the records that will be affected.

PID  FNAME MNAME  LNAME GENDER  DOB
160  2170  Hemant  None  Bhopee    M    11-10-1998

Enter the new first name: Harshal
Enter the new last name: Bhope

Following are the modified rows of the person table:
PID  FNAME MNAME  LNAME GENDER  DOB
0    2170  Harshal  None  Bhope     M    11-10-1998
```

Record updated successfully.

Choosing option 2 to Delete the record from songs table

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Windows PowerShell
Following are the options that we can be executed from the front end interface:
Option #      Description
1             Display contents of tables
2             Modification of tables data
3             Performing Business goals from front end
4             Exit code

Enter option corresponding to the operation that you want to perform: 2
Option #      Description
1             Update name of person from Person table using fname and lname.
2             Delete song from Songs table using song_id.
3             Back to main menu.

Enter option from above: 2
Enter the song id that you want to delete: 2

Following are the modified records of the songs table:
```

	SONG_ID	SONG_NAME	GENRE	REGION	RELEASE_DATE
0	1	Chamak Challoy	Hiphop	1	07-20-2009
1	3	Sugar	Jazz	1	10-08-2000
2	4	Silence	RnB	2	08-31-2009
3	5	Sorry	Hiphop	3	10-30-2000
4	6	Despacito	Rap	3	02-04-2009
5	7	Closure	Jazz	2	08-17-2008
6	8	Mood	RnB	1	11-25-2007
7	9	Maps	Hiphop	2	02-17-2004
8	10	Apna time ayega	Rap	1	07-04-2000
9	11	Like a Rolling Stone	Rap	1	11-25-2008
10	12	Smells Like Teen Spirit	Hiphop	1	07-15-2005
11	13	A Day in the Life	Jazz	3	04-24-2004
12	14	Good Vibrations	Hiphop	3	01-13-2006
13	15	Johnny B. Goode	Jazz	3	10-21-2008
14	16	Respect	RnB	1	11-06-2005
15	17	Be My Baby	RnB	3	05-14-2005
16	18	Whats Going On	Jazz	2	02-22-2004
17	19	I Heard It Through the Grapevine	RnB	1	02-25-2007

Record Deleted Successfully.

Performing Business Goals.

Choosing option 3 from the Main Menu and option 1 to find the number of songs purchased or rented by a given customer.

```
Windows PowerShell
Following are the options that we can be executed from the front end interface:
Option #      Description
1            Display contents of tables
2            Modification of tables data
3 Performing Business goals from front end
4            Exit code

Enter option corresponding to the operation that you want to perform: 3
Option #      Description
1            Find the number of songs purchased or rented by a customer.
2            Generate cummulative sum revenue report for year range specified.
3 Find top k singers with highest number of likes for their songs (k specified by user).
4            Find number of songs that are available, unavailable or both as specified by user.
5            Back to main menu.

Enter option from above: 1
Enter first name of customer: Gene
Enter last name of customer: Avalon
Enter the transaction type (b - purchase, r - rent): b
PID CUST_FNAME CUST_LNAME SONG COUNT
0 2018      Gene      Avalon      5

Following are the options that we can be executed from the front end interface:
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1            Display contents of tables
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Enter option corresponding to the operation that you want to perform:
```

Choosing option 3 from the Main Menu and Option 2 to generate cumulative sum revenue for a given year.

```
Windows PowerShell
Following are the options that we can be executed from the front end interface:
Option #      Description
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Enter option corresponding to the operation that you want to perform: 3
Option #      Description
1            Find the number of songs purchased or rented by a customer.
2            Generate cummulative sum revenue report for year range specified.
3 Find top k singers with highest number of likes for their songs (k specified by user).
4            Find number of songs that are available, unavailable or both as specified by user.
5            Back to main menu.

Enter option from above: 2
Enter start year: 2010
Enter end year: 2015
YEAR YEAR_REVENUE CUMM_REVENUE
0 2010          64          64
1 2011          23          87
2 2012          74         161
3 2013          34         195
4 2014         105         300
5 2015          36         336
```

Choosing option 3 from the Main Menu and Option 3 to find the top n singers with the highest number of likes for their songs.

```
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Enter option corresponding to the operation that you want to perform: 3
Option #      Description
1            Find the number of songs purchased or rented by a customer.
2            Generate cummlative sum revenue report for year range specified.
3 Find top k singers with highest number of likes for their songs (k specified by user).
4            Find number of songs that are available, unavailable or both as specified by user.
5            Back to main menu.

Enter option from above: 3
Enter the value of k: 10
SINGER_FNAME SINGER_LNAME      SONG_NAME  LIKE_COUNT
0    Arthur      Cruz        Heroes     5
1    Dorothy    Cobain      My Generation  5
2    Sam        Clyde      99 Problems  4
3    Perry      Connick,    House of the Rising Sun  4
4    Johnny     Carter      All My Friends  3
5    Maggie     Cline       Billie Jean    3
6    Johnny     Cornell     The Message    3
7    Kurt       Cochran     Unfinished Sympathy  2
8    Harry      Connor     Strawberry Fields Forever  2
9    Dorothy    Cobain     River Deep - Mountain High  2
```

Choosing option 3 from the Main Menu and option 4 to find the available status

```
Windows PowerShell
Following are the options that we can be executed from the front end interface:
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4            Exit code

Enter option corresponding to the operation that you want to perform: 3
Option #      Description
1            Find the number of songs purchased or rented by a customer.
2            Generate cummlative sum revenue report for year range specified.
3 Find top k singers with highest number of likes for their songs (k specified by user).
4            Find number of songs that are available, unavailable or both as specified by user.
5            Back to main menu.

Enter option from above: 4
Enter song type (A/ U/ B): a
Status Song_count
0 Available 65

Following are the options that we can be executed from the front end interface:
Option #      Description
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3 Performing Business goals from front end
4            Exit code

Enter option corresponding to the operation that you want to perform:
```

