ASSESSMENT-1

NAME: ALOK SINHA

REG. NO.: 17BCE2380
Enter password: *******
Welcome to the MySQL monitor. Commands end with ; or \g.
Your MySQL connection id is 16
Server version: 8.0.11 MySQL Community Server - GPL
Copyright (c) 2000, 2018, Oracle and/or its affiliates. All rights reserved.
Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
owners.
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.
mysql> USE ALOK_17BCE2380;
Database changed
mysql> CREATE TABLE CUSTOMER (CNO INT (2), CNAME VARCHAR(10), con_address varchar(10), city varchar(10), state varchar(10), zip int(5), phone int(10));
Query OK, 0 rows affected (0.28 sec)
mysql> DESC CUSTOMER;

```
| Field | Type | Null | Key | Default | Extra |
+----+
cname | varchar(10) | YES | NULL |
con_address | varchar(10) | YES | NULL |
city | varchar(10) | YES | NULL |
state | varchar(10) | YES | NULL |
| phone | int(10) | YES | NULL | |
+----+
7 rows in set (0.00 sec)
mysql> ALTER TABLE customer ADD CONSTRAINT CON_PK3 PRIMARY KEY(cno);
Query OK, 0 rows affected (0.43 sec)
Records: 0 Duplicates: 0 Warnings: 0
mysql> INSERT INTO CUSTOMER VALUES(1,'ALOK','VELLORE','KATPADI','TN',12345,7092440638);
Query OK, 1 row affected (0.03 sec)
mysql> INSERT INTO CUSTOMER VALUES(2, 'BIBEK', 'CHENNAI', 'CHENNAI', 'TN', 12346, 7528392898);
Query OK, 1 row affected (0.03 sec)
mysql> INSERT INTO CUSTOMER VALUES(3, 'RABI', 'CHENNAI', 'CHENNAI', 'TN', 12346, 8765468976);
Query OK, 1 row affected (0.04 sec)
mysql> INSERT INTO CUSTOMER VALUES(4,'ARYAN','ROHINI','DELHI','DL',12347,6789675430);
Query OK, 1 row affected (0.03 sec)
mysql> INSERT INTO CUSTOMER
VALUES(5,'AMIT','BANGLORE','BANGLORE','KARNATAKA',12349,9865798637);
```

```
mysql> SELECT * FROM CUSTOMER;
+----+
cno | cname | con_address | city | state | zip | phone |
+----+
| 1 | ALOK | VELLORE | KATPADI | TN | 12345 | 7092440638 |
| 2 | BIBEK | CHENNAI | CHENNAI | TN | 12346 | 7528392898 |
| 3 | RABI | CHENNAI | CHENNAI | TN | 12346 | 8765468976 |
| 4 | ARYAN | ROHINI | DELHI | DL | 12347 | 6789675430 |
| 5 | AMIT | BANGLORE | BANGLORE | KARNATAKA | 12349 | 9865798637 |
+----+
5 rows in set (0.00 sec)
mysql> ALTER TABLE PARTS ADD CONSTRAINT CON_PK2 PRIMARY KEY(PNO);
Query OK, 0 rows affected (1.34 sec)
Records: 0 Duplicates: 0 Warnings: 0
mysql> INSERT INTO PARTS VALUES (11,20,15,1000);
Query OK, 1 row affected (0.12 sec)
mysql> INSERT INTO PARTS VALUES(12,23,20,2000);
Query OK, 1 row affected (0.17 sec)
mysql> INSERT INTO PARTS VALUES(13,10,8,1500);
Query OK, 1 row affected (0.10 sec)
mysql> INSERT INTO PARTS VALUES(14,5,3,7000);
```

```
Query OK, 1 row affected (0.03 sec)
```

mysql> INSERT INTO PARTS VALUES(15,4,2,10000);

Query OK, 1 row affected (0.06 sec)

mysql> SELECT * FROM PARTS;

+----+

| PNO | ONHAND | ONORDER | COST |

+----+

| 11 | 20 | 15 | 1000 |

| 12 | 23 | 20 | 2000 |

| 13 | 10 | 8 | 1500 |

| 14 | 5 | 3 | 7000 |

| 15 | 4 | 2 | 10000 |

+----+

5 rows in set (0.00 sec)

mysql> ALTER TABLE PURCHASE_DETAILS ADD CONSTRAINT CON_PK3 PRIMARY KEY(INO);

Query OK, 0 rows affected (0.43 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> ALTER TABLE PURCHASE_DETAILS ADD CONSTRAINT CON_FK3 FOREIGN KEY(PNO) REFERENCES PARTS(PNO);

Query OK, 0 rows affected (0.75 sec)

Records: 0 Duplicates: 0 Warnings: 0

```
mysql> DESC PURCHASE_DETAILS;
+----+
| Field | Type | Null | Key | Default | Extra |
+----+
| PNO | int(3) | YES | MUL | NULL | |
| QTY | int(5) | YES | NULL | |
| INO | int(5) | NO | PRI | NULL | |
| PRICE | int(8) | YES | | NULL | |
+----+
4 rows in set (0.12 sec)
mysql> INSERT INTO PURCHASE_DETAILS VALUES (11,20,123,1000);
Query OK, 1 row affected (0.13 sec)
mysql> INSERT INTO PURCHASE_DETAILS VALUES (12,23,124,2000);
Query OK, 1 row affected (0.04 sec)
mysql> INSERT INTO PURCHASE_DETAILS VALUES (13,23,125,1500);
Query OK, 1 row affected (0.18 sec)
mysql> INSERT INTO PURCHASE_DETAILS VALUES (14,5,126,7000);
Query OK, 1 row affected (0.13 sec)
mysql> INSERT INTO PURCHASE_DETAILS VALUES (15,4,127,10000);
Query OK, 1 row affected (0.13 sec)
```

```
mysql> SELECT * FROM PURCHASE_DETAILS;
+----+----+
| PNO | QTY | INO | PRICE |
+----+----+
| 11 | 20 | 123 | 1000 |
| 12 | 23 | 124 | 2000 |
| 13 | 23 | 125 | 1500 |
| 14 | 5 | 126 | 7000 |
| 15 | 4 | 127 | 10000 |
+----+----+
5 rows in set (0.00 sec)
```

mysql> CREATE TABLE INVOICES (INO INT (5), CNO INT (2), IDATE INT (4), ITOTAL INT (8)); Query OK, 0 rows affected (0.28 sec)

mysql> ALTER TABLE INVOICES ADD CONSTRAINT CON_FK4 FOREIGN KEY(INO) REFERENCES PURCHASE_DETAILS(INO);

Query OK, 0 rows affected (0.80 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> ALTER TABLE INVOICES ADD CONSTRAINT CON_FK5 FOREIGN KEY(CNO) REFERENCES CUSTOMER(CNO);

Query OK, 0 rows affected (0.74 sec)

Records: 0 Duplicates: 0 Warnings: 0

```
MySQL> DESC INVOICES;
+----+
| Field | Type | Null | Key | Default | Extra |
+-----+
| INO | int(5) | YES | MUL | NULL | |
| CNO | int(2) | YES | MUL | NULL | |
| IDATE | int(4) | YES | | NULL | |
+----+
4 rows in set (0.00 sec)
mysql> INSERT INTO INVOICES VALUES(123,1,2016,1000);
Query OK, 1 row affected (1.01 sec)
mysql> INSERT INTO INVOICES VALUES (124,2,2017,10000);
Query OK, 1 row affected (0.04 sec)
mysql> INSERT INTO INVOICES VALUES(125,3,2017,15000);
Query OK, 1 row affected (0.05 sec)
mysql> INSERT INTO INVOICES VALUES (126,4,2018,1500);
Query OK, 1 row affected (0.08 sec)
mysql> INSERT INTO INVOICES VALUES (127,5,2018,15000);
```

Query OK, 1 row affected (0.09 sec)

```
mysql> SELECT * FROM INVOICES;
+----+
| INO | CNO | IDATE | ITOTAL |
+----+
| 123 | 1 | 2016 | 1000 |
| 124 | 2 | 2017 | 10000 |
| 125 | 3 | 2017 | 15000 |
| 126 | 4 | 2018 | 1500 |
| 127 | 5 | 2018 | 15000 |
+----+
5 rows in set (0.00 sec)
mysql> SELECT * FROM CUSTOMER;
+----+
| cno | cname | con_address | city | state | zip | phone |
+----+
| 1 | ALOK | VELLORE | KATPADI | TN | 12345 | 7092440638 |
| 2 | BIBEK | CHENNAI | CHENNAI | TN | 12346 | 7528392898 |
| 3 | RABI | CHENNAI | CHENNAI | TN | 12346 | 8765468976 |
| 4 | ARYAN | ROHINI | DELHI | DL | 12347 | 6789675430 |
| 5 | AMIT | BANGLORE | BANGLORE | KARNATAKA | 12349 | 9865798637 |
+----+
```

```
mysql> SELECT * FROM PARTS;
+----+
| PNO | ONHAND | ONORDER | COST |
+----+
| 11 | 20 | 15 | 1000 |
| 12 | 23 | 20 | 2000 |
| 13 | 10 | 8 | 1500 |
| 14 | 5 | 3 | 7000 |
| 15 | 4 | 2 | 10000 |
+----+
5 rows in set (0.00 sec)
mysql> SELECT * FROM PURCHASE_DETAILS;
+----+
| PNO | QTY | INO | PRICE |
+----+
| 11 | 20 | 123 | 1000 |
| 12 | 23 | 124 | 2000 |
| 13 | 23 | 125 | 1500 |
| 14 | 5 | 126 | 7000 |
| 15 | 4 | 127 | 10000 |
+----+
```

```
mysql> SELECT * FROM INVOICES;
+----+
| INO | CNO | IDATE | ITOTAL |
+----+
| 123 | 1 | 2016 | 1000 |
| 124 | 2 | 2017 | 10000 |
| 125 | 3 | 2017 | 15000 |
| 126 | 4 | 2018 | 1500 |
| 127 | 5 | 2018 | 15000 |
+----+

5 rows in set (0.00 sec)
```

3. Check all the customers and office phone number should be unique.

```
mysql> SELECT DISTINCT PHONE FROM CUSTOMER;
+-----+
| PHONE |
+-----+
| 6789675430 |
| 7092440638 |
| 7528392898 |
| 8765468976 |
| 9865798637 |
+-----+
5 rows in set (0.04 sec)
```

4. Display the customers based on city.

5. Display the number of customers based on state.

```
mysql> SELECT STATE,
-> COUNT(*)
-> FROM CUSTOMER
-> GROUP BY STATE;
+-----+
| STATE | COUNT(*) |
+-----+
| TN | 3 |
| DL | 1 |
| KARNATAKA | 1 |
+-----+
3 rows in set (0.01 sec)
```

6. Display the total number of customers who purchased products between 2016 & 2017 and 2017 and 2018.

```
mysql> SELECT * FROM INVOICES WHERE IDATE = 2016 OR IDATE = 2017;
+----+----+----+
| INO | CNO | IDATE | ITOTAL |
+----+----+-----+
| 123 | 1 | 2016 | 1000 |
| 124 | 2 | 2017 | 10000 |
| 125 | 3 | 2017 | 15000 |
+----+-----+------+
3 rows in set (0.00 sec)
```

```
mysql> SELECT * FROM INVOICES WHERE IDATE= 2017 OR IDATE=2018;
+----+
| INO | CNO | IDATE | ITOTAL |
+----+
| 124 | 2 | 2017 | 10000 |
| 125 | 3 | 2017 | 15000 |
| 126 | 4 | 2018 | 1500 |
| 127 | 5 | 2018 | 15000 |
+----+
4 rows in set (0.00 \text{ sec})
mysql> SELECT * FROM INVOICES WHERE IDATE= 2016;
+----+
| INO | CNO | IDATE | ITOTAL |
+----+
| 123 | 1 | 2016 | 1000 |
+----+
1 row in set (0.00 sec)
mysql> SELECT * FROM INVOICES WHERE IDATE= 2017;
+----+
| INO | CNO | IDATE | ITOTAL |
+----+
| 124 | 2 | 2017 | 10000 |
| 125 | 3 | 2017 | 15000 |
+----+
2 \text{ rows in set } (0.00 \text{ sec})
mysql> SELECT * FROM INVOICES WHERE IDATE= 2018;
+----+
| INO | CNO | IDATE | ITOTAL |
+----+
| 126 | 4 | 2018 | 1500 |
| 127 | 5 | 2018 | 15000 |
+----+
2 rows in set (0.00 \text{ sec})
```

8. Add a column COMPANY in the PARTS table and update the table.

```
mysql> ALTER TABLE PARTS ADD COMPANY VARCHAR(10);
Query OK, 0 rows affected (0.79 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> SELECT * FROM PARTS;
+----+-----+
| PNO | ONHAND | ONORDER | COST | COMPANY |
+----+-----+------+
| 11 | 20 | 15 | 1000 | NULL |
```

```
| 12 |
      23 |
           20 | 2000 | NULL |
      10 | 8 | 1500 | NULL |
| 13 |
| 14 |
      5 |
           3 | 7000 | NULL |
| 15 | 4 |
           2 | 10000 | NULL |
+----+
5 rows in set (0.00 \text{ sec})
mysql> UPDATE PARTS SET COMPANY='TATA' WHERE PNO='11';
Query OK, 1 row affected (0.21 sec)
Rows matched: 1 Changed: 1 Warnings: 0
mysql> UPDATE PARTS SET COMPANY='BIRLA' WHERE PNO='12';
Query OK, 1 row affected (0.24 sec)
Rows matched: 1 Changed: 1 Warnings: 0
mysql> UPDATE PARTS SET COMPANY='SAMSUNG' WHERE PNO='13';
Query OK, 1 row affected (0.16 sec)
Rows matched: 1 Changed: 1 Warnings: 0
mysql> UPDATE PARTS SET COMPANY='HP' WHERE PNO='14';
Query OK, 1 row affected (0.08 sec)
Rows matched: 1 Changed: 1 Warnings: 0
mysql> UPDATE PARTS SET COMPANY='HUNDAI' WHERE PNO='14';
Query OK, 1 row affected (0.08 sec)
Rows matched: 1 Changed: 1 Warnings: 0
mysql> SELECT * FROM PARTS;
+----+
| PNO | ONHAND | ONORDER | COST | COMPANY |
+----+
      20 | 15 | 1000 | TATA |
| 11 |
| 12 |
      23 | 20 | 2000 | BIRLA |
| 13 | 10 | 8 | 1500 | SAMSUNG |
| 14 | 5 | 3 | 7000 | HUNDAI |
| 15 | 4 | 2 | 10000 | NULL |
+----+
5 rows in set (0.00 \text{ sec})
9. Rename table PURCHASE DETAIL as DETAIL.
mysql> RENAME TABLE PURCHASE_DETAILS TO DETAIL;
Query OK, 0 rows affected (0.27 sec)
mysql> SELECT * FROM DETAIL;
+----+
| PNO | QTY | INO | PRICE |
+----+
| 11 | 20 | 123 | 1000 |
| 12 | 23 | 124 | 2000 |
```

| 13 | 23 | 125 | 1500 |

```
| 14 | 5 | 126 | 7000 |
| 15 | 4 | 127 | 10000 |
+----+
5 rows in set (0.00 sec)
```

10. Delete the entries which having city as DELHI from the CUSTOMER table.

```
mysql> alter table invoices
  -> drop foreign key con_fk5;
Query OK, 0 rows affected (0.27 sec)
Records: 0 Duplicates: 0 Warnings: 0
mysql> delete from customer
  -> where city='delhi';
Query OK, 1 row affected (0.07 sec)
mysql> select * from customer;
+----+
| cno | cname | con_address | city | state | zip | phone |
+----+
| 1 | ALOK | VELLORE | KATPADI | TN | 12345 | 7092440638 | | | | | | | |
| 2 | BIBEK | CHENNAI | CHENNAI | TN | 12346 | 7528392898 | 3 | RABI | CHENNAI | CHENNAI | TN | 12346 | 8765468976 |
| 5 | AMIT | BANGLORE | BANGLORE | KARNATAKA | 12349 | 9865798637 |
+----+
4 rows in set (0.00 \text{ sec})
```

11. Count the number of customer location with repetition from customer table.

```
mysql> select city,
-> count(*)
-> from customer
-> group by city;
+-----+
| city | count(*) |
+-----+
| KATPADI | 1 |
| CHENNAI | 2 |
```

12. Display the products having price more than Rs.5000

mysql> SELECT * FROM DETAIL WHERE PRICE >5000;
+----+
| PNO | QTY | INO | PRICE |
+----+
| 14 | 5 | 126 | 7000 |
| 15 | 4 | 127 | 10000 |
+----+

13. Add a column DOB in the CUSTOMER table and update the table.

```
| 2 | BIBEK | CHENNAI | CHENNAI | TN | 12346 | 7528392898 | NULL |
| 3 | RABI | CHENNAI | CHENNAI | TN | 12346 | 8765468976 | NULL |
| 5 | AMIT | BANGLORE | BANGLORE | KARNATAKA | 12349 | 9865798637 | NULL |
+----+
4 rows in set (0.00 sec)
mysql> UPDATE CUSTOMER SET DOB='1996' WHERE CNO='1';
Query OK, 1 row affected (0.06 sec)
Rows matched: 1 Changed: 1 Warnings: 0
mysql> UPDATE CUSTOMER SET DOB='1997' WHERE CNO='2';
Query OK, 1 row affected (0.08 sec)
Rows matched: 1 Changed: 1 Warnings: 0
mysql> UPDATE CUSTOMER SET DOB='1999' WHERE CNO='3';
Query OK, 1 row affected (0.01 sec)
Rows matched: 1 Changed: 1 Warnings: 0
mysql> UPDATE CUSTOMER SET DOB='1998' WHERE CNO='5';
Query OK, 1 row affected (0.05 sec)
Rows matched: 1 Changed: 1 Warnings: 0
mysql> SELECT * FROM CUSTOMER;
+----+
cno | cname | con_address | city | state | zip | phone | DOB |
+----+
| 1 | ALOK | VELLORE | KATPADI | TN | 12345 | 7092440638 | 1996 |
| 2 | BIBEK | CHENNAI | CHENNAI | TN | 12346 | 7528392898 | 1997 |
| 3 | RABI | CHENNAI | CHENNAI | TN | 12346 | 8765468976 | 1999 |
5 | AMIT | BANGLORE | BANGLORE | KARNATAKA | 12349 | 9865798637 | 1998 |
+----+
```

14. Display the products that sold more than 10 quantity.

15. Drop primary key constraint from any one table.

mysql> alter table detail

-> drop primary key;

Query OK, 5 rows affected (0.64 sec)

Records: 5 Duplicates: 0 Warnings: 0