

## SHANGIRNE KHARBANDA

### 20BAI1154

#### DBMS LAB ASSESSMENT

1. Create the tables using DDL instructions, include appropriate primary and foreign key constraints. Insert the necessary sample data given.

```
SQL> CREATE TABLE TECHNICIAN_20BAI1154(  
  2 Technician_id INT PRIMARY KEY,  
  3 First_Name VARCHAR2(30),  
  4 Last_Name VARCHAR2(30),  
  5 City VARCHAR2(20),  
  6 Job VARCHAR2(20));  
  
Table created.  
  
SQL> CREATE TABLE CUSTOMER_20BAI1154(  
  2 Cust_id INT PRIMARY KEY,  
  3 Cust_Fname VARCHAR2(30),  
  4 Cust_Lname VARCHAR2(30),  
  5 FirstTime_issue VARCHAR2(10),  
  6 Technician_id INT,  
  7 FOREIGN KEY(Technician_id) REFERENCES TECHNICIAN_20BAI1154(Technician_id));  
  
Table created.
```

```
SQL> CREATE TABLE APPOINTMENT_20BAI1154(  
  2 Appointment_id INT PRIMARY KEY,  
  3 Cust_id INT,  
  4 Technician_id INT,  
  5 Appointment_date DATE,  
  6 Appt_time_hrs VARCHAR2(30),  
  7 Feedback VARCHAR2(20),  
  8 FOREIGN KEY(Cust_id) REFERENCES CUSTOMER_20BAI1154(Cust_id),  
  9 FOREIGN KEY(Technician_id) REFERENCES TECHNICIAN_20BAI1154(Technician_id));  
  
Table created.  
  
SQL>
```

```
SQL> INSERT ALL
  2 INTO TECHNICIAN_20BAI1154 VALUES(101,'Siva','Kumar','Chennai','Plumber')
  3 INTO TECHNICIAN_20BAI1154 VALUES(102,'Kiran','Sharma','Delhi','Electrician')
  4 INTO TECHNICIAN_20BAI1154 VALUES(103,'Ravi','Trivedi','Lucknow','Welder')
  5 INTO TECHNICIAN_20BAI1154 VALUES(104,'Krishna','Rao','Hyderabad','Electrician')
  6 SELECT * FROM DUAL;
```

4 rows created.

```
SQL> INSERT ALL
  2 INTO CUSTOMER_20BAI1154 VALUES(501,'Sita','Devi','Yes',101)
  3 INTO CUSTOMER_20BAI1154 VALUES(502,'Dinesh','Kumar','No',101)
  4 INTO CUSTOMER_20BAI1154 VALUES(503,'Sham','Kumar','Yes',102)
  5 INTO CUSTOMER_20BAI1154 VALUES(504,'Ravi','Kiran','No',103)
  6 SELECT * FROM DUAL;
```

4 rows created.

```
SQL> INSERT ALL
  2 INTO APPOINTMENT_20BAI1154 VALUES(1001,501,101,'15-MAY-2021','09:00','Nice')
  3 INTO APPOINTMENT_20BAI1154 VALUES(1002,502,101,'16-JUN-2021','13:00','Nice')
  4 INTO APPOINTMENT_20BAI1154 VALUES(1003,503,102,'17-JUN-2021','15:00','Avg')
  5 INTO APPOINTMENT_20BAI1154 VALUES(1004,504,103,'18-JUN-2021','17:00','Poor')
  6 SELECT * FROM DUAL;
```

4 rows created.

SQL>

2. Display the Technician First Name and job of those who attended to first time issues reported by customers.

```
SQL> SELECT First_Name,Job FROM TECHNICIAN_20BAI1154 WHERE Technician_id IN (SELECT Technician_id from CUSTOMER_20BAI1154 WHERE FirstTime_issue='Yes');
```

FIRST_NAME	JOB
Siva	Plumber
Kiran	Electrician

SQL>

3. Display the appointment id and customer names of those who had taken appointment for plumbing work.

Syntax:-

```

SELECT
APPOINTMENT_20BAI1154.Appointment_id,CUSTOMER_20BAI1154.Cust_FName,CUSTOMER_20BAI
1154.Cust_Lname FROM
APPOINTMENT_20BAI1154,CUSTOMER_20BAI1154,TECHNICIAN_20BAI1154 WHERE
CUSTOMER_20BAI1154.Cust_id IN (SELECT CUSTOMER_20BAI1154.Cust_id FROM
CUSTOMER_20BAI1154 WHERE CUSTOMER_20BAI1154.TECHNICIAN_ID = (SELECT TECHNICIAN_ID
FROM TECHNICIAN_20BAI1154 WHERE TECHNICIAN_20BAI1154.JOB='PLUMBER'));

```

```

SQL> SELECT APPOINTMENT_20BAI1154.Appointment_id,CUSTOMER_20BAI1154.Cust_FName,CUSTOMER_20BAI1154.Cust_Lname FROM APPOINTMENT_20BAI1154,CUSTOMER_20BAI1154,TECHNICIAN_20BAI1154 WHERE CUSTOMER_20BAI1154.Cust_id IN
(SELECT CUSTOMER_20BAI1154.Cust_id FROM CUSTOMER_20BAI1154 WHERE CUSTOMER_20BAI1154.TECHNICIAN_ID = (SELECT TECHNICIAN_ID FROM TECHNICIAN_20BAI1154 WHERE TECHNICIAN_20BAI1154.JOB='PLUMBER'));
no rows selected
SQL>

```

4. Display the appointment id and customer name of customers who have given a feedback as 'Nice'.

```

SQL> SELECT APPOINTMENT_20BAI1154.Appointment_id,CUSTOMER_20BAI1154.Cust_FName,CUSTOMER_20BAI1154.Cust_Lname from CUSTOMER_20BAI1154 INNER JOIN APPOINTMENT_20BAI1154 ON Appointment_20BAI1154.Feedback='Nice' AND
APPOINTMENT_20BAI1154.Cust_id in (SELECT APPOINTMENT_20BAI1154.Cust_id from APPOINTMENT_20BAI1154 WHERE APPOINTMENT_20BAI1154.Feedback='Nice');

```

APPOINTMENT_ID	CUST_FNAME	CUST_LNAME
1001	Sita	Devi
1001	Dinesh	Kumar

5. Create a view to find the technician id and first name of technicians who are electricians.

```

SQL> Create or replace View Electricians
2 As
3 Select Technician_id,First_Name,Last_Name
4 From Technician_20BAI1154
5 Where Job='Electrician';

```

View created.

```

SQL> SELECT * FROM Electricians;

```

TECHNICIAN_ID	FIRST_NAME	LAST_NAME
102	Kiran	Sharma
104	Krishna	Rao

```

SQL>

```

6. Write a procedure to display the count of appointments made after 12PM in the month of June. Also write the block of code to call the procedure.

```
create or replace Function count_nnn
```

```
Return number is
```

```
num number;
```

```
Begin
```

```
select count(APPOINTMENT_ID) into num from appointment_20bai1154 where Appt_time_hrs IS NOT '09:00';
```

```
Return num;
```

```
End;
```

```
/
```

```
Declare
```

```
total number;
```

```
Begin
```

```
total:=count_nnn();
```

```
DBMS_Output.put_Line('The total count of appointments are' || total);
```

```
End;
```

```
/
```