

ARYAN 21BRS1272

Assignment - 2

Q1

```
SQL> create table department_21BRS1272(  
2 dept_no varchar(5) primary key,  
3 dept_name varchar(20) NOT NULL,  
4 location varchar(20)  
5 );
```

Table created.

```
SQL> create table employee_21BRS1272(  
2 emp_no varchar(6) PRIMARY KEY,  
3 emp_name varchar(20) NOT NULL,  
4 DOB date,  
5 address varchar(30),  
6 DOJ date,  
7 mobile_no number(10),  
8 dept_no references department_21BRS1272(dept_no),  
9 salary number(9,2),  
10 check(salary>50000)  
11 );
```

Table created.

Q2

```
SQL> alter table employee_21BRS1272  
2 add designation varchar(20);
```

Table altered.

Q3

```
SQL> alter table employee_21BRS1272  
2 DROP COLUMN address;
```

Table altered.

Q4

```
SQL> insert into department_21BRS1272 values('d01','scope','delta');
1 row created.

SQL> insert into department_21BRS1272 values('d02','sense','beta');
1 row created.

SQL> insert into department_21BRS1272 values('d03','mech','alpha');
1 row created.

SQL> insert into department_21BRS1272 values('d04','civil','sigma');
1 row created.

SQL> insert into department_21BRS1272 values('d05','ssl','gamma');
1 row created.
```

```
SQL> insert into employee_21BRS1272 values('e01','Ram','23/jan/2000','14/apr/2022',1234762387,'d01',90000,'Manager');
1 row created.

SQL> insert into employee_21BRS1272 values('e02','Rahul','04/feb/1998','24/may/2022',9834531287,'d02',60000,'assistant');
1 row created.

SQL> insert into employee_21BRS1272 values('e03','Aman','06/dec/1995','06/jun/2022',9434531287,'d03',70000,'assistant professor');
1 row created.

SQL> insert into employee_21BRS1272 values('e04','Raman','16/nov/1994','08/mar/2022',9999955555,'d04',70000,'assistant professor');
1 row created.

SQL> insert into employee_21BRS1272 values('e05','Jhon','16/jun/1997','08/jan/2022',9999322255,'d05',70000,'assistant professor');
1 row created.
```

A) While entering duplicate dept_no we are getting error because dept_no is primary key and it cannot have duplicate value

```
SQL> insert into department_21BRS1272 values('d05','scope','AB2');
insert into department_21BRS1272 values('d05','scope','AB2')
*
ERROR at line 1:
ORA-00001: unique constraint (SYSTEM.SYS_C008319) violated

SQL>
```

B) While entering duplicate emp_no we are getting error because emp_no is primary key and it cannot have duplicate value

```
SQL> insert into employee_21BRS1272 values('e01','Ram','01/jan/1998','24/may/2022',1234531287,'d02',60000,'assistant'
);
insert into employee_21BRS1272 values('e01','Ram','01/jan/1998','24/may/2022',1234531287,'d02',60000,'assistant')
*
ERROR at line 1:
ORA-00001: unique constraint (SYSTEM.SYS_C008325) violated
```

C) While entering NULL value in emp_name we are getting error because emp_name is a unique constraint (NOT NULL) where values cannot be Null.

```
SQL> insert into employee_21BRS1272 values('e07','','16/jun/1997','08/jan/2022',9999322255,'d05',70000,'assistant professor');
insert into employee_21BRS1272 values('e07','','16/jun/1997','08/jan/2022',9999322255,'d05',70000,'assistant professor')
*
ERROR at line 1:
ORA-01400: cannot insert NULL into ("SYSTEM"."EMPLOYEE_21BRS1272"."EMP_NAME")
```

D) The check attribute is violated as check should be greater than 50000 but we have entered less than 50000

```
SQL> insert into employee_21BRS1272 values('e06','Arav','26/jun/1997','08/mar/2022',9994572255,'d05',25000,'assistant professor');
insert into employee_21BRS1272 values('e06','Arav','26/jun/1997','08/mar/2022',9994572255,'d05',25000,'assistant professor')
*
ERROR at line 1:
ORA-02290: check constraint (SYSTEM.SYS_C008324) violated
```

E) While entering new dept_no in table error comes up as the new value is not available in the parent table.

```
SQL> insert into employee_21BRS1272 values('e06','Arav','26/jun/1997','08/mar/2022',9994572255,'d09',125000,'assistant profess
insert into employee_21BRS1272 values('e06','Arav','26/jun/1997','08/mar/2022',9994572255,'d09',125000,'assistant professor')
*
ERROR at line 1:
ORA-02291: integrity constraint (SYSTEM.SYS_C008326) violated - parent key not
found
```

Q5

```
SQL> select * from department_21BRS1272;
```

DEPT_	DEPT_NAME	LOCATION
d01	scope	delta
d02	sense	beta
d03	mech	alpha
d04	civil	sigma
d05	ssl	gamma

```
SQL> select * from employee_21BRS1272;
```

EMP_NO	EMP_NAME	DOB	DOJ	MOBILE_NO	DEPT_	SALARY
DESIGNATION						

e01	Ram	23-JAN-00	14-APR-22	124762387	d01	90000
Manager						

e02	Rahul	04-FEB-98	24-MAY-22	945762387	d02	60000
assistant						

e03	Aman	06-DEC-95	06-JUN-22	944562387	d03	70000
assistant professor						

EMP_NO	EMP_NAME	DOB	DOJ	MOBILE_NO	DEPT_	SALARY
DESIGNATION						

e04	Raman	16-NOV-94	08-MAR-22	9999955555	d04	70000
assistant professor						

e05	Jhon	16-JUN-97	08-JAN-22	9999322255	d05	70000
assistant professor						

Q6

```
SQL> select emp_no,emp_name from employee_21BRS1272 where dept_no='d02';
```

EMP_NO	EMP_NAME
e02	Rahul

Q7

```
SQL> select mobile_no from employee_21BRS1272 where emp_name='Jhon';
```

MOBILE_NO
9999322255

Q8

```
SQL> delete from employee_21BRS1272 where mobile_no = 9999955555;
```

1 row deleted.

```
SQL>
```

Q9

```
SQL> update employee_21BRS1272
  2  set salary=salary+0.1*salary;
```

4 rows updated.

Q10

```
SQL> select emp_no,emp_name from employee_21BRS1272 where salary between 60000 and 70000;
```

EMP_NO	EMP_NAME
e02	Rahul

Q11

```
SQL> select emp_no,emp_name,designation,dept_no,salary from employee_21BRS1272 order by salary asc;
```

EMP_NO	EMP_NAME	DESIGNATION	DEPT_	SALARY
e02	Rahul	assistant	d02	66000
e05	Jhon	assistant professor	d05	77000
e03	Aman	assistant professor	d03	77000
e01	Ram	Manager	d01	99000

Q12

```
SQL> select emp_no,emp_name,designation,dept_no,salary from employee_21BRS1272 order by salary desc;
```

EMP_NO	EMP_NAME	DESIGNATION	DEPT_	SALARY
e01	Ram	Manager	d01	99000
e05	Jhon	assistant professor	d05	77000
e03	Aman	assistant professor	d03	77000
e02	Rahul	assistant	d02	66000

```
SQL>
```