



# **DATABASE MANAGEMENT SYSTEMS**

**(SLOT-D2)**

## **LAB ASSIGNMENT-2**

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**Q)Create a table "student" with the following attributes:**

- 1. register number-> primary key**
- 2. first name-> not null**
- 3. last name**
- 4. Qualifying marks-> greater than 50**
- 5. email id-> unique**
- 6. nationality -> India, USA**
- 7. age-> between 18 and 22**

```
create table student(  
    s_regno int primary key,  
    s_fname varchar2(20) not null,  
    s_lname varchar2(20),  
    marks number(2) check(marks>50),  
    email_id varchar2(20) unique,  
    nation varchar2(20) check(nation in ('India','USA')),  
    age number(2) check(age between 18 and 22)  
);
```

### **SCHEMA:**

Columns								
#	Column	Type	Length	Precision	Scale	Nullable	Semantics	Comment
1	S_REGNO	NUMBER	22		0	No		
2	S_FNAME	VARCHAR2	20			No	Byte	
3	S_LNAME	VARCHAR2	20			Yes	Byte	
4	MARKS	NUMBER	22	2	0	Yes		
5	EMAIL_ID	VARCHAR2	20			Yes	Byte	
6	NATION	VARCHAR2	20			Yes	Byte	
7	AGE	NUMBER	22	2	0	Yes		

**Q)Add rows to the table, try adding rows that doesn't satisfy these constraints. Take the screenshot of the error message.**

```
insert into student values(1,'Vibhu','Kumar',65,'vibhu@gmail.com','India',19);
```

1 row(s) inserted.

```
insert into student values(2,'Avnish','Tiwari',40,'vibhu@gmail.com','India',19);
```

**ERROR MESSAGE:**

```
insert into student values(2,'Avnish','Tiwari',40,'vibhu@gmail.com','India',19)
```

ORA-02290: check constraint (SQL\_LBXYXEPJABUVPEDIJZFJFRVFU.SYS\_C0034927653) violated ORA-06512: at "SYS.DBMS\_SQL", line 1721

```
insert into student values(2,'Avnish','Tiwari',70,'Avnish@gmail.com','USA',20);
```

1 row(s) inserted.

```
insert into student values(2,'Anamaya','Vyas',95,'Anamaya@gmail.com','India',20);
```

**ERROR MESSAGE:**

```
insert into student values(2,'Anamaya','Vyas',95,'Anamaya@gmail.com','India',20)
```

ORA-00001: unique constraint (SQL\_LBXYXEPJABUVPEDIJZFJFRVFU.SYS\_C0034927656) violated ORA-06512: at "SYS.DBMS\_SQL", line 1721

```
insert into student values(3,'Anamaya','Vyas',95,'Anamaya@gmail.com','India',20);
```

1 row(s) inserted.

```
insert into student values(4,'Aditya','Chaudhary',80,'Aditya@gmail.com','Pakistan',20);
```

**ERROR MESSAGE:**

```
insert into student values(4,'Aditya','Chaudhary',80,'Aditya@gmail.com','Pakistan',20)
```

ORA-02290: check constraint (SQL\_LBXYXEPJABUVPEDIJZFJFRVFU.SYS\_C0034927654) violated ORA-06512: at "SYS.DBMS\_SQL", line 1721

```
insert into student values(4,'Aditya','Chaudhary',80,'Aditya@gmail.com','USA',20);
```

1 row(s) inserted.

```
insert into student values(5,'','Jain',85,'Atishay@gmail.com','USA',21);
```

#### ERROR MESSAGE:

```
insert into student values(5,'','Jain',85,'Atishay@gmail.com','USA',21)
```

ORA-01400: cannot insert NULL into ("SQL\_LBXYEPJABUVPEDIJZFJRVFU"."STUDENT"."S\_FNAME") ORA-06512: at "SYS.DBMS\_SQL", line 1721

**Add few rows with age as 20, add few rows with qualifying marks greater than 90, add few rows with the nationality "USA".**

The following rows were inserted:

```
insert into student values(5,'Atishay','Jain',85,'Atishay@gmail.com','USA',21);
insert into student values(6,'Yash','Jain',55,'Yash@gmail.com','USA',19);
insert into student values(7,'Khushi','Gupta',99,'Khushi@gmail.com','India',19);
insert into student values(8,'Arnav','Batla',91,'Batla@gmail.com','USA',21);
insert into student values(9,'Ishika','Dahake',51,'Dahake@gmail.com','USA',20);
insert into student values(10,'Atharva','Agarwal',98,'Atharva@gmail.com','USA',19);
```

#### DATABASE:

S_REGNO	S_FNAME	S_LNAME	MARKS	EMAIL_ID	NATION	AGE
1	Vibhu	Kumar	65	vibhu@gmail.com	India	19
2	Avnish	Tiwari	70	Avnish@gmail.com	USA	20
3	Anamaya	Vyas	95	Anamaya@gmail.com	India	20
4	Aditya	Chaudhary	80	Aditya@gmail.com	USA	20
5	Atishay	Jain	85	Atishay@gmail.com	USA	21
6	Yash	Jain	55	Yash@gmail.com	USA	19
7	Khushi	Gupta	99	Khushi@gmail.com	India	19
8	Arnav	Batla	91	Batla@gmail.com	USA	21
9	Ishika	Dahake	51	Dahake@gmail.com	USA	20
10	Atharva	Agarwal	98	Atharva@gmail.com	USA	19

**Select the details of students whose age is 20:**

```
select * from student where age=20;
```

S_REGNO	S_FNAME	S_LNAME	MARKS	EMAIL_ID	NATION	AGE
2	Avnish	Tiwari	70	Avnish@gmail.com	USA	20
3	Anamaya	Vyas	95	Anamaya@gmail.com	India	20
4	Aditya	Chaudhary	80	Aditya@gmail.com	USA	20
9	Ishika	Dahake	51	Dahake@gmail.com	USA	20

**Select the register number and name of those students whose qualifying marks is greater than 90:**

```
select s_regno,s_fname from student where marks>90;
```

S_REGNO	S_FNAME
3	Anamaya
7	Khushi
8	Arnav
10	Atharva

**Select the register number and email ids of students from USA:**

```
select s_regno,email_id from student where nation='USA';
```

S_REGNO	EMAIL_ID
2	Avnish@gmail.com
4	Aditya@gmail.com
5	Atishay@gmail.com
6	Yash@gmail.com
8	Batla@gmail.com
9	Dahake@gmail.com
10	Atharva@gmail.com