

## Assignment-2

**Stream : IT**

**Subject: Database Management System Lab**

**Subject Code: IT-691**

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1. Write SQL command to add primary key to the table STUDENT with RegNo as Primary Key.

Code:

```
alter table Student add constraint pk_regNo primary key(RegNo);
```

output:

```
SQL> alter table Student add constraint pk_regNo primary key(RegNo);  
Table altered.
```

2. Display all student records.

Code:

```
select * from Student;
```

Output:

```
SQL> select * from Student;  
  
REGNO      ROLLNO NAME      ADDRESS      PHONENO  YEAROFADM DEPT      YEAR BIRTHDAT  
-----  
012301     123001 Ashish     Jadavpur     24761892   2003 CSE      3 01-06-81  
012315     123015 Kamal      Kasba        24424987   2003 CSE      3 19-09-81  
012424     124024 Ipsita     Kaikhali     25739608   2004 CSE      2 15-08-82  
012250     122050 Anita      Hooghly      36719695   2002 IT       4 22-12-80  
012344     123044 Bilap      Howrah       2003 IT       3 03-01-82  
012357     123057 Samik      Barasat      25426742   2003 IT       3 15-07-81  
012419     124019 Srija      Garia        24755655   2004 EE       2 25-10-82  
012427     124027 Saibal     Garia        24753306   2004 ECE      2 22-03-83  
012236     122036 Santanu   DumDum       2002 ECE      4 11-12-80  
012349     123049 Gita       Kasba        24428682   2003 MCA      3 14-04-81  
  
10 rows selected.
```

3. Display name, address and year of admission of each student.

Code:

```
select Name,Address,YearOfAdm from Student;
```

Output:

```
SQL> select Name,Address,YearOfAdm from Student;
```

NAME	ADDRESS	YEAROFADM
Ashish	Jadavpur	2003
Kamal	Kasba	2003
Ipsita	Kaikhali	2004
Anita	Hooghly	2002
Bilap	Howrah	2003
Samik	Barasat	2003
Srija	Garia	2004
Saibal	Garia	2004
Santanu	DumDum	2002
Gita	Kasba	2003

10 rows selected.

4. List the name and year of students who are in Computer Science.

Code:

```
select Name,year from Student where DeptCode = 'CSE';
```

Output:

```
SQL> select Name,year from Student where DeptCode = 'CSE';
```

NAME	YEAR
Ashish	3
Kamal	3
Ipsita	2

5. List the names and departments of students belonging to 3rd year.

Code:

```
select Name,DeptCode from Student where year = '3';
```

Output:

```
SQL> select Name,DeptCode from Student where year = '3';

NAME          DEPT
-----
Ashish        CSE
Kamal         CSE
Bilap         IT
Samik         IT
Gita          MCA

SQL> 
```

6. Display names of students with 'a' as the second letter in their names.

Code:

```
select Name from Student where Name like '_a%';
```

Output:

```
SQL> select Name from Student where Name like '_a%';

NAME
-----
Kamal
Samik
Saibal
Santanu

SQL> 
```

7. Display names of students in descending alphabetical order.

Code:

```
select Name from Student order by Name DESC;
```

Output:

```
SQL> select Name from Student order by Name DESC;

NAME
-----
Srija
Santanu
Samik
Saibal
Kamal
Ipsita
Gita
Bilap
Ashish
Anita

10 rows selected.
```

8. Display names and addresses of students who took admission in the year 2004.

Code:

```
select Name,Address from Student where YearOfAdm = '2004';
```

Output:

```
SQL> select Name,Address from Student where YearOfAdm = '2004';

NAME          ADDRESS
-----
Ipsita        Kaikhali
Srija         Garia
Saibal        Garia
```

9. List the names of students who does not have a phone number.

Code:

```
select Name from Student where PhoneNo is null;
```

Output:

```
SQL> select Name from Student where PhoneNo is null;

NAME
-----
Bilap
Santanu
```

10. List names of student and their departments whose date of birth is after 1st June 1981.

Code:

```
select Name,DeptCode from Student where BirthDate > '01-06-81';
```

Output:

```
SQL> select Name,DeptCode from Student where BirthDate > '01-06-81';

NAME          DEPT
-----
Kamal         CSE
Ipsita        CSE
Bilap         IT
Samik         IT
Srija         EE
Saibal        ECE
```

11. Create a CHECK constraint on this table for the field Year such that Year should be between 1&4.

Code:

```
alter table Student add constraint check_year check (year between 1 and 4);
```

Output:

```
SQL> alter table Student add constraint check_year check (year between 1 and 4);
Table altered.
```

12. Update 4th year students to make Year=5. Observe and note the message.

Code:

```
update Student set year = 5 where year = 4;
```

Output:

```
SQL> update Student set year = 5 where year = 4;
update Student set year = 5 where year = 4
*
ERROR at line 1:
ORA-02290: check constraint (ST2.CHECK_YEAR) violated
```