

## Lab01: Foundation statements of SQL

### Exercises

Using StudentInformation database, formulate the following queries:

1. Get StdID, StdName, StdDOB, StdPhone and ProgID from Std table.

### Query:

```
select StdId,StdName,StdDOB,StdPhone,progId from Std
```

Results		Messages			
	StdId	StdName	StdDOB	StdPhone	progId
1	1	Bisma	2000-02-02 00:00:00	03012345678	1
2	2	Sadia	2001-01-01 00:00:00	03112345678	1
3	3	Sarah	2001-03-05 00:00:00	03023456789	1
4	4	Namra	2001-06-19 00:00:00	03123456789	1
5	5	Waqar	1999-09-10 00:00:00	03312345678	1
6	6	Noman	2001-08-25 00:00:00	03323456789	1
7	7	Abrar	2001-01-05 00:00:00	03412345678	1
8	8	Mohsin	2001-03-23 00:00:00	03423456789	1
9	9	Sikandar	2001-09-13 00:00:00	03612345678	1
10	10	Javed	2001-10-21 00:00:00	03512345678	1

2. Select all permanent teachers from teacher table.

### Query:

```
select * from Teacher where Status = 'Permanent'
```

Results		Messages								
	TeacherID	TeacherName	TeacherDOB	TeacherDOJ	TeacherGender	Status	BasicSalary	HouseRent	Job	Manager
1	2	Dr. Ahmed	1980-01-31 00:00:00	2004-01-31 00:00:00	Male	Permanent	80000.00	45000.00	S. Lecturer	5
2	5	Dr. Safdar	1980-01-01 00:00:00	2014-01-01 00:00:00	Male	Permanent	200000.00	65000.00	J. Associate Prof	NULL
3	6	Dr. Sohaib	1972-09-01 00:00:00	2012-01-06 00:00:00	Male	Permanent	280000.00	80000.00	Sr. Associate Prof	NULL
4	7	Dr. Fatima	1984-06-06 00:00:00	2018-02-01 00:00:00	Female	Permanent	225000.00	50000.00	J. Assist Prof	6

3. Display all the Program IDs that have students enrolled without repetition from Std Table.

## Query:

```
select distinct progId from Std
```

Results		Messages	
	progId		
1	1		

4. Display data of all students who belong to ProgramID = 1

## Query:

```
select * from Std where progId = '1'
```

Results		Messages							
	StdID	StdName	StdDOB	FirstSem	StdPhone	StdAddress	StdEmail	GuardianContact	ProgID
1	1	Bisma	2000-02-02 00:00:00	1	03012345678	NULL	NULL	NULL	1
2	2	Sadia	2001-01-01 00:00:00	1	03112345678	NULL	NULL	NULL	1
3	3	Sarah	2001-03-05 00:00:00	3	03023456789	NULL	NULL	NULL	1
4	4	Namra	2001-06-19 00:00:00	3	03123456789	NULL	NULL	NULL	1
5	5	Waqar	1999-09-10 00:00:00	1	03312345678	NULL	NULL	NULL	1
6	6	Noman	2001-08-25 00:00:00	3	03323456789	NULL	NULL	NULL	1
7	7	Abrar	2001-01-05 00:00:00	4	03412345678	NULL	NULL	NULL	1
8	8	Mohsin	2001-03-23 00:00:00	4	03423456789	NULL	NULL	NULL	1
9	9	Sikandar	2001-09-13 00:00:00	6	03612345678	NULL	NULL	NULL	1
10	10	Javed	2001-10-21 00:00:00	6	03512345678	NULL	NULL	NULL	1

5. Display names of students who belong to ProgramID=1.

## Query:

```
select StdName from Std where progId = '1'
```

Results Messages

	StdName
1	Bisma
2	Sadia
3	Sarah
4	Namra
5	Waqar
6	Noman
7	Abrar
8	Mohsin
9	Sikandar
10	Javed

6. Display all faculty names and their Manager number from Teacher table.

## Query:

```
select TeacherName,Manager from teacher
```

Results Messages

	TeacherName	Manager
1	Dr. Ahmed	5
2	Dr. Khalid	5
3	Dr. Iman	6
4	Dr. Safdar	NULL
5	Dr. Sohaib	NULL
6	Dr. Fatima	6

7. Display all lab based courses, which are being taught in either Computer Science program or IT program.

## Query:

```
select Coursename from Course where CreditHrsLab='1'
```

	Coursename
1	Introduction To Computing
2	Programming Fundamentals
3	Data Structures
4	Digital Logic
5	Visual Prog
6	Computer Arch and Design

8. Display name and salary of teachers where salaries lies in the range of 100 K to 200 K.

## Query:

```
select teachername,basicSalary from teacher where basicSalary  
between '100000' and '200000'
```

	teachername	basicSalary
1	Dr. Khalid	100000.00
2	Dr. Iman	100000.00
3	Dr. Safdar	200000.00