

Name:Abdul Basit Bhat
102003121
2CO5
Assignment 1
Q1

```
create table students(  
rno number,  
name varchar(50),  
dob date,  
gender varchar(10),  
class varchar(20),  
college varchar(50),  
city varchar(50),  
marks number);
```

Q2

```
insert into students values(1,'abdul',TO_DATE('01.01.2002','DD.MM.YY'),'male','4th sem','TIET  
Patiala','Baramulla','100');
```

```
insert into students values(2,'anchit',TO_DATE('01.02.2002','DD.MM.YY'),'male','4th sem','TIET  
Patiala','Merut','100');
```

```
insert into students values(3,'tushar',TO_DATE('16.08.2002','DD.MM.YY'),'male','4th sem','TIET  
Patiala','Lucknow','100');
```

```
insert into students values(4,'anchit',TO_DATE('01.01.2002','DD.MM.YY'),'male','4th sem','TIET  
Patiala','Gandhi Nagar','100');
```

```
insert into students values(5,'Anuj',TO_DATE('01.01.2002','DD.MM.YY'),'male','4th sem','TIET  
Patiala','Gandhi Nagar','100');
```

RNO	NAME	DOB	GENDER	CLASS	COLLEGE	CITY	MARKS
1	abdul	01-JAN-02	male	4th sem	TIET Patiala	Baramulla	100
2	anchit	01-FEB-02	male	4th sem	TIET Patiala	Merut	100
3	tushar	16-AUG-02	male	4th sem	TIET Patiala	Lucknow	100
4	anchit	01-JAN-02	male	4th sem	TIET Patiala	Gandhi Nagar	100
5	Anuj	01-JAN-02	male	4th sem	TIET Patiala	Gandhi Nagar	100

Q3

```
select * from students;
```

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Assignment 1

RNO	NAME	DOB	GENDER	CLASS	COLLEGE	CITY	MARKS
1	abdu1	01-JAN-02	male	4th sem	TIET Patiala	Baramulla	100
2	anchit	01-FEB-02	male	4th sem	TIET Patiala	Merut	100
3	tushar	16-AUG-02	male	4th sem	TIET Patiala	Lucknow	100
4	anchit	01-JAN-02	male	4th sem	TIET Patiala	Gandhi Nagar	100
5	Anuj	01-JAN-02	male	4th sem	TIET Patiala	Gandhi Nagar	100

Q4

desc students;

TABLE STUDENTS

Column	Null?	Type
RNO	-	NUMBER
NAME	-	VARCHAR2(50)
DOB	-	DATE
GENDER	-	VARCHAR2(10)
CLASS	-	VARCHAR2(20)
COLLEGE	-	VARCHAR2(50)
CITY	-	VARCHAR2(50)
MARKS	-	NUMBER

Q5

select rno,name,class from students where CITY='Gandhi Nagar';

RNO	NAME	CLASS
4	anchit	4th sem
5	Anuj	4th sem

Q6

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select * from students order by marks asc;

RNO	NAME	DOB	GENDER	CLASS	COLLEGE	CITY	MARKS
1	abdul	01-JAN-02	male	4th sem	TIET Patiala	Baramulla	100
2	anchit	01-FEB-02	male	4th sem	TIET Patiala	Merut	100
5	Anuj	01-JAN-02	male	4th sem	TIET Patiala	Gandhi Nagar	100
4	anchit	01-JAN-02	male	4th sem	TIET Patiala	Gandhi Nagar	100
3	tushar	16-AUG-02	male	4th sem	TIET Patiala	Lucknow	100

Q7

update students

set

marks=89

where

rno=5;

select * from students;

RNO	NAME	DOB	GENDER	CLASS	COLLEGE	CITY	MARKS
1	abdul	01-JAN-02	male	4th sem	TIET Patiala	Baramulla	100
2	anchit	01-FEB-02	male	4th sem	TIET Patiala	Merut	100
3	tushar	16-AUG-02	male	4th sem	TIET Patiala	Lucknow	100
4	anchit	01-JAN-02	male	4th sem	TIET Patiala	Gandhi Nagar	100
5	Anuj	01-JAN-02	male	4th sem	TIET Patiala	Gandhi Nagar	89

Q8

update students

set

city='Trikuta Nagar'

where

rno=5;

select * from students;

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RNO	NAME	DOB	GENDER	CLASS	COLLEGE	CITY	MARKS
1	abdul	01-JAN-02	male	4th sem	TIET Patiala	Baramulla	100
2	anchit	01-FEB-02	male	4th sem	TIET Patiala	Merut	100
3	tushar	16-AUG-02	male	4th sem	TIET Patiala	Lucknow	100
4	anchit	01-JAN-02	male	4th sem	TIET Patiala	Gandhi Nagar	100
5	Anuj	01-JAN-02	male	4th sem	TIET Patiala	Trikuta Nagar	89

Q9

delete from students

where

city='Merut';

select * from students;

RNO	NAME	DOB	GENDER	CLASS	COLLEGE	CITY	MARKS
1	abdul	01-JAN-02	male	4th sem	TIET Patiala	Baramulla	100
3	tushar	16-AUG-02	male	4th sem	TIET Patiala	Lucknow	100
4	anchit	01-JAN-02	male	4th sem	TIET Patiala	Gandhi Nagar	100
5	Anuj	01-JAN-02	male	4th sem	TIET Patiala	Trikuta Nagar	89

Q10

delete from students

where

marks < 90;

select * from students;

RNO	NAME	DOB	GENDER	CLASS	COLLEGE	CITY	MARKS
1	abdul	01-JAN-02	male	4th sem	TIET Patiala	Baramulla	100
3	tushar	16-AUG-02	male	4th sem	TIET Patiala	Lucknow	100
4	anchit	01-JAN-02	male	4th sem	TIET Patiala	Gandhi Nagar	100

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Assignment 2

Q1

```
create table emp(  
empno number,  
ename varchar(20),  
job varchar(20),  
sal number,  
deptno number);
```

Q2

```
insert into emp  
values(1,'abdul','SDE',1000000,123);
```

```
insert into emp  
values(2,'adnan','SDE',1000000,123);
```

```
insert into emp  
values(3,'anchit','SDE',1000000,124);
```

```
insert into emp  
values(4,'Tushar','SDE',1000000,124);
```

```
insert into emp  
values(5,'Raju','SDE',50000,10);
```

```
insert into emp  
values(6,'Jay','SDE',1000,124);
```

```
insert into emp  
values(7,'Billu','Clerk',10000,20);
```

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Assignment 2

insert into emp

values(8,'Tilu','Salesperson',1000,124);

EMPNO	ENAME	JOB	SAL	DEPTNO
1	abdul	SDE	1000000	123
2	adnan	SDE	1000000	123
3	anchit	SDE	1000000	124
4	Tushar	SDE	1000000	124
5	Raju	SDE	50000	10
6	Jay	SDE	1000	124
7	Billu	Clerk	10000	20
8	Tilu	Salesperson	1000	124

select * from emp;

Q3

select empno,ename from emp

where

deptno=124;

EMPNO	ENAME
3	anchit
4	Tushar
6	Jay
8	Tilu

Q4

select ename,sal from emp

where job='SDE' AND sal>20000;

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Assignment 2

ENAME	SAL
abdu1	1000000
adnan	1000000
anchit	1000000
Tushar	1000000
Raju	50000

Q5

```
select ename,sal from emp  
where job='SDE'  
or job='Clerk';
```

ENAME	SAL
abdu1	1000000
adnan	1000000
anchit	1000000
Tushar	1000000
Raju	50000
Jay	1000
Billu	10000

Q6

```
select * from emp  
where sal between 999 AND 50000;
```

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Assignment 2

EMPNO	ENAME	JOB	SAL	DEPTNO
5	Raju	SDE	50000	10
6	Jay	SDE	1000	124
7	Billu	Clerk	10000	20
8	Tilu	Salesperson	1000	124

Q7

```
select * from emp
```

```
where deptno in (10,20,123);
```

EMPNO	ENAME	JOB	SAL	DEPTNO
1	abdul	SDE	1000000	123
2	adnan	SDE	1000000	123
5	Raju	SDE	50000	10
7	Billu	Clerk	10000	20

Q9

```
select deptno,sal from emp
```

```
order by deptno,sal desc;
```


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Assignment 2

DEPTNO	SAL
10	50000
20	10000
123	1000000
123	1000000
124	1000000
124	1000000
124	1000
124	1000

Q10

```
select ename from emp  
where ename LIKE 'a%';
```

ENAME
abdu1
adnan
anchit

Q11

```
select ename from emp  
where ename LIKE '%t';
```

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Assignment 2

ENAME
anchit

Q12

```
select ename from emp
where ename like '%aa'
or ename like '%AA';
```

no data found

Q13

```
select ename from emp
where ename like '_b%'
or ename like '_B%';
```

ENAME
abdul

Q14

```
select ename from emp
where ename like 'a%'
or ename like '%a';
```

ENAME
abdul
adnan
anchit

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Assignment 3
/*Q1*/

/*

select sysdate

from dual;

*/

SYSDATE
21-MAR-22

/*Q2*/

/*

select to_char(sysdate,'dd')

from dual;

*/

SYSDATE
21-MAR-22

/*Q3*/

/*

select to_char(sysdate,'month year')

from dual;

*/

TO_CHAR(SYSDATE, 'MONTHYEAR')
march twenty twenty-two

/*Q4*/

/*

select to_char(sysdate,'ddspth "of" mmspth "month of year" year')

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from dual;

TO_CHAR(SYSDATE, 'DDSPTH"OF"MMSPTH"MONTHOFYEAR"YEAR')

twenty-first of third month of year twenty twenty-two

*/

/*Q5*/

/*

select to_char(sysdate,'HH24:Mi:SS AM')

from dual;

*/

TO_CHAR(SYSDATE, 'HH24:MI:SSAM')
--

07:28:21 AM

/*Q6*/

/*

select NEXT_DAY(sysdate,'FRIDAY')

from dual;

*/

NEXT_DAY(SYSDATE, ' FRIDAY')

25-MAR-22

/*Q7*/

/*

select ROUND(sysdate,'month')

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Assignment 3
from dual;

*/

ROUND(SYSDATE, 'MONTH')

01-APR-22

/*Q8*/

/*

select TRUNC(sysdate,'month')

from dual;

*/

TRUNC(SYSDATE, 'MONTH')

01-MAR-22

/*Q9*/

/*

select ROUND(sysdate,'year')

from dual;

*/

ROUND(SYSDATE, 'YEAR')

01-JAN-22

/*Q10*/

/*

select TRUNC(sysdate,'year')

from dual;

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Assignment 3
*/

TRUNC(SYSDATE, 'YEAR')

01-JAN-22

/*Q11*/

/*

select to_char(sysdate+3)

from dual;

*/

TO_CHAR(SYSDATE+3)

24-MAR-22

/*select * from hr.employees;*/

/*Q12*/

/*

select to_char(HIRE_DATE,'dd')

from hr.employees;

*/

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Assignment 3

TO_CHAR(HIRE_DATE, 'DD')
17
21
13
03
21
25
05
07
17
16
28
30

/*Q13*/

/*

select first_name,hire_date

from hr.employees

where to_char(hire_date,'dy')='mon';

*/

FIRST_NAME	HIRE_DATE
Bruce	21-MAY-07
Shanta	10-OCT-05
Jason	14-JUN-04
Renske	14-JUL-03
Gerald	15-OCT-07
Danielle	19-MAR-07
Sundar	24-MAR-08
Amit	21-APR-08
Sundar	21-APR-08

/*Q14*/

/*

select first_name,hire_date

from hr.employees

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Assignment 3

where to_char(hire_date,'mm')=to_char(sysdate,'mm');

*/

FIRST_NAME	HIRE_DATE
Jose Manuel	07-MAR-06
Steven	08-MAR-08
Randall	15-MAR-06
Alberto	10-MAR-05
David	24-MAR-05
Christopher	30-MAR-06
Patrick	04-MAR-04
Lindsey	10-MAR-05
Danielle	19-MAR-07
Sundar	24-MAR-08
Lisa	11-MAR-05
Harrison	23-MAR-06
Elizabeth	24-MAR-07
Alyssa	19-MAR-05

/*Q15*/

/*

select first_name,hire_date

from hr.employees

where to_char(hire_date,'mm')=to_char(sysdate-30,'mm');

*/

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FIRST_NAME	HIRE_DATE
Valli	05-FEB-06
Diana	07-FEB-07
James	16-FEB-05
Hazel	06-FEB-08
John	12-FEB-06
David	23-FEB-08
William	23-FEB-07
Jean	23-FEB-06
Girard	03-FEB-08
Alexis	20-FEB-05
Anthony	07-FEB-07

/*Q16*/

/*

```
create table train (  
train_no number,  
date_of_dept date,  
time_of_dept date,  
time_of_arri date
```

```
);
```

```
*/
```

/*Q17*/

/*

```
insert into train
```

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Assignment 3

```
values(1,to_date('16-02-2022','DD-MM-YYYY'),to_date('16-02-2022 10:30:21','DD-MM-YYYY  
HH24:MI:SS'),to_date('16-02-2022 11:30:21','DD-MM-YYYY HH24:MI:SS'));
```

insert into train

```
values(2,to_date('17-02-2022','DD-MM-YYYY'),to_date('17-02-2022 11:30:21','DD-MM-YYYY  
HH24:MI:SS'),to_date('17-02-2022 12:30:21','DD-MM-YYYY HH24:MI:SS'));
```

insert into train

```
values(3,to_date('18-02-2022','DD-MM-YYYY'),to_date('18-02-2022 12:30:21','DD-MM-YYYY  
HH24:MI:SS'),to_date('18-02-2022 13:30:21','DD-MM-YYYY HH24:MI:SS'));
```

insert into train

```
values(4,to_date('19-02-2022','DD-MM-YYYY'),to_date('19-02-2022 13:30:21','DD-MM-YYYY  
HH24:MI:SS'),to_date('19-02-2022 14:30:21','DD-MM-YYYY HH24:MI:SS'));
```

insert into train

```
values(5,to_date('20-02-2022','DD-MM-YYYY'),to_date('20-02-2022 10:30:21','DD-MM-YYYY  
HH24:MI:SS'),to_date('20-02-2022 11:30:21','DD-MM-YYYY HH24:MI:SS'));
```

*/

TRAIN_NO	DATE_OF_DEPT	TIME_OF_DEPT	TIME_OF_ARRI
1	16-FEB-22	16-FEB-22	16-FEB-22
2	17-FEB-22	17-FEB-22	17-FEB-22
3	18-FEB-22	18-FEB-22	18-FEB-22
4	19-FEB-22	19-FEB-22	19-FEB-22
5	20-FEB-22	20-FEB-22	20-FEB-22

/*Q18*/

/*

select * from train;

*/

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Assignment 3

TRAIN_NO	DATE_OF_DEPT	TIME_OF_DEPT	TIME_OF_ARRI
1	16-FEB-22	16-FEB-22	16-FEB-22
2	17-FEB-22	17-FEB-22	17-FEB-22
3	18-FEB-22	18-FEB-22	18-FEB-22
4	19-FEB-22	19-FEB-22	19-FEB-22
5	20-FEB-22	20-FEB-22	20-FEB-22

/*Q19*/

/*

```
select to_char(time_of_dept,'hh24:mi:ss'),to_char(time_of_arri,'hh24:mi:ss')
from train;
```

*/

TO_CHAR(TIME_OF_DEPT, 'HH24:MI:SS')	TO_CHAR(TIME_OF_ARRI, 'HH24:MI:SS')
10:30:21	11:30:21
11:30:21	12:30:21
12:30:21	13:30:21
13:30:21	14:30:21
10:30:21	11:30:21

/*Q20*/

/*

```
select train_no,to_char(time_of_dept,'hh24:mi:ss'),to_char(time_of_arri,'hh24:mi:ss') from train
where to_char(time_of_arri,'hh24:mi:ss')>='12:00:00';
```

*/

TRAIN_NO	TO_CHAR(TIME_OF_DEPT, 'HH24:MI:SS')	TO_CHAR(TIME_OF_ARRI, 'HH24:MI:SS')
2	11:30:21	12:30:21
3	12:30:21	13:30:21
4	13:30:21	14:30:21

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Assignment 3

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Assignment 4

Assignment 4

```
select chr(65)
```

```
from dual;
```

```
select concat('ab','cd')
```

```
from dual;
```

```
select instr('abdul','d')
```

```
from dual;
```

```
select length('abdul')
```

```
from dual;
```

```
select lpad('a',7,'*')
```

```
from dual;
```

```
select ltrim('abdul','d')
```

```
from dual;
```

```
select rpad('a',7,'*')
```

```
from dual;
```

```
select rtrim('abdul','l')
```

```
from dual;
```

```
select replace ('abdulzbhat','z','basit')
```

```
from dual;
```

```
select substr('abdulbasitbhat',6,5)
```

```
from dual;
```

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Assignment 4

```
select initcap('abdul')  
from dual;
```

```
select lower('abdul')  
from dual;
```

```
select upper('abdul')  
from dual;
```

```
select translate('d','abcddeeff','c')  
from dual;
```

```
select abs(-5.5)  
from dual;
```

```
select ceil(5.5)  
from dual;
```

```
select cos(90)  
from dual;
```

```
select exp(2)  
from dual;
```

```
select floor(5.5)  
from dual;
```

```
select mod(10,5)
```

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Assignment 4
from dual;

select power(5,2)
from dual;

select round(5.5)
from dual;

select sign(-5.5)
from dual;

select sqrt(9)
from dual;

select trunc(5.5)
from dual;

select sysdate
from dual;

select add_months(sysdate,2)
from dual;

select last_day(sysdate)
from dual;

select months_between(sysdate,to_date('19/10/2022','dd/mm/yyyy'))
from dual;

select next_day(sysdate,'Monday')

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Assignment 4
from dual;

select greatest(1,2,3,4)
from dual;

select least(1,2,3,4)
from dual;

select to_char(sysdate,'hh24:mi:ss')
from dual;*/

/*update scott.emp
set hiredate=sysdate
where ename='KING';*/

select * from scott.emp;

select sal+NVL(to_char(comm),0) from scott.emp;

select ename from scott.emp
where to_char(hiredate,'yyyy')='1981';*/

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Assignment 4

CHR(65)

A

[Download CSV](#)

CONCAT('AB','CD')

abcd

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INSTR('ABDUL','D')

3

[Download CSV](#)

LENGTH('ABDUL')

5

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Assignment 4

```
LPAD('A',7,'*')
```

```
*****a
```

[Download CSV](#)

```
LTRIM('ABDUL','D')
```

```
abdul
```

[Download CSV](#)

```
RPAD('A',7,'*')
```

```
a*****
```

[Download CSV](#)

```
RTRIM('ABDUL','L')
```

```
abdu
```

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Assignment 4

REPLACE('ABDULZBHAT','Z','BASIT')
--

abdulbasitbhat

[Download CSV](#)

SUBSTR('ABDULBASITBHAT',6,5)

basit

[Download CSV](#)

INITCAP('ABDUL')

Abdul

[Download CSV](#)

LOWER('ABDUL')

abdul

TRANSLATE('D','ABCDEEFF','C')
-

[Download CSV](#)

ABS(-5.5)

5.5

[Download CSV](#)

CEIL(5.5)

6

[Download CSV](#)

COS(90)

-.44807361612917015236547731439963950742
--

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Assignment 4

EXP(2)
7.3890560989306502272304274605750078132

[Download CSV](#)

FLOOR(5.5)
5

[Download CSV](#)

MOD(10,5)
0

[Download CSV](#)

POWER(5,2)
25

[Download CSV](#)

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Assignment 4

ROUND(5.5)

6

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SIGN(-5.5)

-1

[Download CSV](#)

SQRT(9)

3

[Download CSV](#)

TRUNC(5.5)

5

[Download CSV](#)

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Assignment 4

SYSDATE

21-MAR-22

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ADD_MONTHS(SYSDATE,2)

21-MAY-22

[Download CSV](#)

LAST_DAY(SYSDATE)

31-MAR-22

[Download CSV](#)

MONTHS_BETWEEN(SYSDATE,TO_DATE('19/10/2022','DD/MM/YYYY'))

-6.92519974611708482676224611708482676225

NEXT_DAY(SYSDATE,'MONDAY')

28-MAR-22

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GREATEST(1,2,3,4)

4

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LEAST(1,2,3,4)

1

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Assignment 4

SAL+NVL (TO_CHAR (COMM),0)
5000
2850
2450
2975
3000
3000
800
1900
1750
2650
1500
1100
950
1300

Name:Abdul Basit Bhat

Roll No:102003121

Group: 2CO5

Assignment 5

Assignment 5

/*Q2*/

```
/*create table dept(  
deptno number primary key,  
dname varchar(10) check(dname in('Acc','comp','elect'))  
);*/  
  
/*  
select * from user_constraints;  
*/
```

/*Q1*/

```
/*  
create table emp(  
empno number constraint emp_pk1 primary key,  
ename varchar(20) unique,  
job varchar(10) check(job in('Prof','AP','Lect')),  
sal number not null,  
deptno number,  
constraint emp_fk1 foreign key(deptno) references dept(deptno)  
);  
*/
```


Name: Abdul Basit Bhat

Roll No: 102003121

Group: 2CO5

Assignment 5

```
22 desc emp;  
23 desc dept;
```

TABLE EMP

Column	Null?	Type
EMPNO	NOT NULL	NUMBER
ENAME	-	VARCHAR2(20)
JOB	-	VARCHAR2(10)
SAL	NOT NULL	NUMBER
DEPTNO	-	NUMBER

[Download CSV](#)

5 rows selected.

TABLE DEPT

Column	Null?	Type
DEPTNO	NOT NULL	NUMBER
DNAME	-	VARCHAR2(10)

[Download CSV](#)

2 rows selected.

Q3, Q4, Q5

```
/*create table S(  
sno number primary key,  
sname varchar(20),  
city varchar(10));
```

```
create table P(  
pno number primary key,  
pname varchar(20),  
clolor varchar(10));
```

```
create table J(  
jno number primary key,  
jname varchar(20),  
city varchar(10));*/
```

```
desc S;
```

```
desc P;
```

```
desc J;
```

Name: Abdul Basit Bhat

Roll No: 102003121

Group: 2CO5

Assignment 5

TABLE S

Column	Null?	Type
SNO	NOT NULL	NUMBER
SNAME	-	VARCHAR2(20)
CITY	-	VARCHAR2(10)

[Download CSV](#)

3 rows selected.

TABLE P

Column	Null?	Type
PNO	NOT NULL	NUMBER
PNAME	-	VARCHAR2(20)
COLOR	-	VARCHAR2(10)

[Download CSV](#)

3 rows selected.

TABLE J

Column	Null?	Type
JNO	NOT NULL	NUMBER
JNAME	-	VARCHAR2(20)
CITY	-	VARCHAR2(10)

[Download CSV](#)

Q6

create table SPJ(

sno number,

pno number,

jno number,

qty number,

constraint spj_pk1 primary key(sno,pno,jno),

constraint spj_fk11 foreign key(sno) references S(sno),

constraint spj_fk111 foreign key(pno) references P(pno),

constraint spj_fk1111 foreign key(jno) references J(jno));

desc SPJ;

Name:Abdul Basit Bhat

Roll No:102003121

Group: 2CO5

Assignment 5

```
20
21  /*
22  create table SPJ(
23  sno number,
24  pno number,
25  jno number,
26  qty number,
27  constraint spj_pk1 primary key(sno,pno,jno),
28  constraint spj_fk11 foreign key(sno) references S(sno),
29  constraint spj_fk111 foreign key(pno) references P(pno),
30  constraint spj_fk1111 foreign key(jno) references J(jno));
31  */
32
33  desc SPJ;
34
```

TABLE SPJ

column	Null?	Type
SNO	NOT NULL	NUMBER
PNO	NOT NULL	NUMBER
JNO	NOT NULL	NUMBER
QTY	-	NUMBER

[Download CSV](#)

4 rows selected.

Q7

```
/*
```

```
insert into dept values(01,'comp');
```

```
insert into dept values(02,'Acc');
```

```
insert into dept values(03,'elect');
```

```
*/
```

```
/*
```

```
insert into emp values(01,'Abdul Basit','Prof','10000000',01);
```

```
insert into emp values(02,'Anchit Rana','AP','10000000',02);
```

```
insert into emp values(03,'Aayush Rangra','Lect','10000000',03);
```

```
*/
```

```
/*
```

```
insert into S values(01,'Raju','Patiala');
```

```
insert into S values(02,'kaju','Chandigarh');
```

```
insert into S values(03,'Ramu','Jalandar');
```

```
*/
```

Name: Abdul Basit Bhat

Roll No: 102003121

Group: 2CO5

Assignment 5

/*

insert into P values(01,'Pen','Blue');

insert into P values(02,'Copy','Red');

insert into P values(03,'Book','Green');

*/

/*

insert into J values(01,'abc','Blue');

insert into J values(02,'def','Red');

insert into J values(03,'ghi','Green');

*/

/*

insert into SPJ values(01,02,03,5);

insert into SPJ values(02,01,01,6);

insert into SPJ values(03,02,03,7);

*/

/*Display*/

/*

select * from emp;

select * from dept;

select * from S;

select * from P;

select * from J;

select * from SPJ;

*/

emp

Name: Abdul Basit Bhat

Roll No: 102003121

Group: 2CO5

Assignment 5

EMPNO	ENAME	JOB	SAL	DEPTNO
1	Abdul Basit	Prof	10000000	1
2	Anchit Rana	AP	10000000	2
3	Aayush Rangra	Lect	10000000	3

[Download CSV](#)

dept

DEPTNO	DNAME
3	elect
1	comp
2	Acc

S

SNO	SNAME	CITY
1	Raju	Patiala
2	kaju	Chandigarh
3	Ramu	Jalandar

P

PNO	PNAME	COLOR
1	Pen	Blue
2	Copy	Red
3	Book	Green

Name: Abdul Basit Bhat
Roll No: 102003121
Group: 2CO5
Assignment 5

J

JNO	JNAME	CITY
1	abc	Blue
2	def	Red
3	ghi	Green

SPJ

SNO	PNO	JNO	QTY
1	2	3	5
3	2	3	7
2	1	1	6

Download CSV

Name: Abdul Basit Bhat

Roll No: 102003121

Group: 2CO5

Assignment 6

Assignment 6

Q1

desc emp;

desc dept;

desc S;

desc P;

desc J;

desc SPJ;

Emp

Column	Null?	Type
EMPNO	NOT NULL	NUMBER
ENAME	-	VARCHAR2(20)
JOB	-	VARCHAR2(10)
SAL	NOT NULL	NUMBER
DEPTNO	-	NUMBER

Dept

Column	Null?	Type
DEPTNO	NOT NULL	NUMBER
DNAME	-	VARCHAR2(10)

S

Column	Null?	Type
SNO	NOT NULL	NUMBER
SNAME	-	VARCHAR2(20)
CITY	-	VARCHAR2(10)

Name: Abdul Basit Bhat

Roll No: 102003121

Group: 2CO5

Assignment 6

P

Column	Null?	Type
PNO	NOT NULL	NUMBER
PNAME	-	VARCHAR2(20)
COLOR	-	VARCHAR2(10)

J

Column	Null?	Type
JNO	NOT NULL	NUMBER
JNAME	-	VARCHAR2(20)
CITY	-	VARCHAR2(10)

SPJ

Column	Null?	Type
SNO	NOT NULL	NUMBER
PNO	NOT NULL	NUMBER
JNO	NOT NULL	NUMBER
QTY	-	NUMBER

Name: Abdul Basit Bhat
Roll No: 102003121
Group: 2CO5
Assignment 6

Q2

select constraint_name, table_name from user_constraints

where table_name='EMP' or table_name='dept' or table_name='S' or table_name='S' or
table_name='P' or table_name='J' or table_name='SPJ';

CONSTRAINT_NAME	TABLE_NAME
SYS_C0081202199	EMP
SYS_C0081202200	EMP
EMP_PK1	EMP
SYS_C0081202202	EMP
EMP_FK1	EMP
SYS_C0081202332	S
SYS_C0081202333	P
SYS_C0081202334	J
SPJ_PK1	SPJ
SPJ_FK11	SPJ
SPJ_FK111	SPJ
SPJ_FK1111	SPJ

Q3

alter table emp

drop constraint SYS_C0081202202;

Note: As I had not given name to unique constraint I was not able to delete it, so I deliberately entered a duplicate ename row. It gave me error that SYS_C0081202202 constraint was not satisfied. So I got to know that SYS_C0081202202 was the name of unique constraint for ename.

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Roll No: 102003121
Group: 2CO5
Assignment 6

Q4

```
select * from user_constraints;
```

```
alter table emp
```

```
drop constraint emp_fk1;
```

Q5

```
alter table emp
```

```
modify (deptno number,
```

```
constraint emp_fk1 foreign key(deptno) references dept(deptno));
```

Q6

```
alter table emp
```

```
modify (ename char(50));
```

TABLE EMP

Column	Null?	Type
EMPNO	NOT NULL	NUMBER
ENAME	-	CHAR(50)
JOB	-	VARCHAR2(10)
SAL	NOT NULL	NUMBER
DEPTNO	-	NUMBER

Q7

```
alter table dept
```

```
modify (dname varchar(30));
```

Name: Abdul Basit Bhat

Roll No: 102003121

Group: 2CO5

Assignment 6

TABLE DEPT

Column	Null?	Type
DEPTNO	NOT NULL	NUMBER
DNAME	-	VARCHAR2(30)

Q8

alter table emp

add (comm number(10));

TABLE EMP

Column	Null?	Type
EMPNO	NOT NULL	NUMBER
ENAME	-	CHAR(50)
JOB	-	VARCHAR2(10)
SAL	NOT NULL	NUMBER
DEPTNO	-	NUMBER
COMM	-	NUMBER(10,0)

Q9

Q9

alter table J

drop column city;

TABLE J

Column	Null?	Type
JNO	NOT NULL	NUMBER
JNAME	-	VARCHAR2(20)

Q10

create table duplicate_emp as select * from emp;

Name: Abdul Basit Bhat

Roll No: 102003121

Group: 2CO5

Assignment 6

EMPNO	ENAME	JOB	SAL	DEPTNO	COMM
1	Abdul Basit	Prof	10000000	1	-
2	Anchit Rana	AP	10000000	2	-
3	Aayush Rangra	Lect	10000000	3	-

Q11

create table duplicateOne_emp as select * from emp where 1=0;

alter table duplicateOne_emp

rename column ename to dupename

alter table duplicateOne_emp

rename column empno to dupeno;

alter table duplicateOne_emp

rename column job to dupjob;

alter table duplicateOne_emp

rename column sal to dupsal;

alter table duplicateOne_emp

rename column deptno to dupdeptno;

desc duplicateOne_emp

TABLE DUPLICATEONE_EMP

Column	Null?	Type
DUPENO	-	NUMBER
DUPENAME	-	CHAR(50)
DUPJOB	-	VARCHAR2(10)
DUPSAL	NOT NULL	NUMBER
DUPDEPTNO	-	NUMBER
COMM	-	NUMBER(10,0)

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Roll No: 102003121

Group: 2CO5

Assignment 6

Q12

update emp

set ename='Ayush Tejas', job='AP'

where deptno=03;

EMPNO	ENAME	JOB	SAL	DEPTNO	COMM
1	Abdul Basit	Prof	10000000	1	-
2	Anchit Rana	AP	10000000	2	-
3	Ayush Tejas	AP	10000000	3	-

Q13

delete from emp

where (deptno=(select deptno from dept where dname='comp'));

EMPNO	ENAME	JOB	SAL	DEPTNO	COMM
2	Anchit Rana	AP	10000000	2	-
3	Ayush Tejas	AP	10000000	3	-

Note:

Used user_constraints table to get details about constraints used in my table

Name: Abdul Basit Bhat

Roll No: 102003121

Group: 2CO5

Assignment 7

Assignment 7

Creating tables and inserting values

```
create table SalesPeople(
```

```
Snum number constraint SP_pk1 primary key,
```

```
Sname varchar(20) constraint SP_Uni unique,
```

```
City varchar(10),
```

```
Comm number
```

```
);
```

```
create table Customers(
```

```
Cnum number constraint C_pk1 primary key,
```

```
Cname varchar(20),
```

```
City varchar(10) constraint c_NN NOT NULL,
```

```
Snum number,
```

```
Constraints C_fk foreign key(Snum) references SalesPeople(Snum)
```

```
);
```

```
create table Orders(
```

```
Onum number constraint O_pk1 primary key,
```

```
Amt number(10,2),
```

```
Odate date,
```

```
Cnum number,
```

```
Snum number,
```

```
Constraints O_fk1 foreign key(Cnum) references Customers(Cnum),
```

```
Constraints O_fk2 foreign key(Snum) references SalesPeople(Snum)
```

```
);
```

Name: Abdul Basit Bhat
Roll No: 102003121
Group: 2CO5
Assignment 7

```
insert into SalesPeople values(1001,'Peel','London',12);  
insert into SalesPeople values(1002,'Serres','Sanjose',13);  
insert into SalesPeople values(1004,'Motika','London',11);  
insert into SalesPeople values(1007,'Rifkin','Barcelona',15);  
insert into SalesPeople values(1003,'Axelrod','Newyork',10);
```

```
insert into Customers values(2001,'Hoffman','London',1001);  
insert into Customers values(2002,'Giovanni','Rome',1003);  
insert into Customers values(2003,'Liu','Sanjose',1002);  
insert into Customers values(2004,'Grass','Berlin',1002);  
insert into Customers values(2006,'Clemens','London',1001);  
insert into Customers values(2008,'Cisneros','Sanjose',1007);  
insert into Customers values(2007,'Pereira','Rome',1004);
```

```
insert into Orders values(3001,18.69,to_date('03-10-1990','DD-MM-YYYY'),2008,1007);  
insert into Orders values(3003,767.19,to_date('03-10-1990','DD-MM-YYYY'),2001,1001);  
insert into Orders values(3002,1900.10,to_date('03-10-1990','DD-MM-YYYY'),2007,1004);  
insert into Orders values(3005,5160.45,to_date('03-10-1990','DD-MM-YYYY'),2003,1002);  
insert into Orders values(3006,1098.16,to_date('03-10-1990','DD-MM-YYYY'),2008,1007);  
insert into Orders values(3009,1713.23,to_date('04-10-1990','DD-MM-YYYY'),2002,1003);  
insert into Orders values(3007,75.75,to_date('04-10-1990','DD-MM-YYYY'),2004,1002);  
insert into Orders values(3008,4273.00,to_date('05-10-1990','DD-MM-YYYY'),2006,1001);  
insert into Orders values(3010,1309.95,to_date('06-10-1990','DD-MM-YYYY'),2004,1002);  
insert into Orders values(3011,9891.88,to_date('06-10-1990','DD-MM-YYYY'),2006,1001);
```

.....

Name: Abdul Basit Bhat
Roll No: 102003121
Group: 2CO5
Assignment 7

Q1

```
select Sname, Count(*) from SalesPeople  
having Sname like 'A%' or Sname like 'a%'  
group by Sname;
```

SNAME	COUNT(*)
Axelrod	1

Q2

```
select * from SalesPeople  
where Snum in (select Snum from Orders having SUM(Amt) >= 2000 group by Snum)  
;
```

SNUM	SNAME	CITY	COMM
1001	Peel	London	12
1002	Serres	Sanjose	13

Q3

```
select Sname, Count(*) from SalesPeople having Snum in (select Snum from SalesPeople  
where City='Newyork')  
group by Snum, Sname;
```


Name: Abdul Basit Bhat

Roll No: 102003121

Group: 2CO5

Assignment 7

SNAME	COUNT(*)
Axelrod	1

Q4

select Sname, Count(*) from SalesPeople having Snum in (select Snum from SalesPeople
where City='London' or City='Paris')

group by Snum, Sname;

SNAME	COUNT(*)
Motika	1
Peel	1

Q5

Select Snum, Odate, Count(*) from Orders

group by Snum, Odate;

SNUM	ODATE	COUNT(*)
1001	03-OCT-90	1
1002	03-OCT-90	1
1003	04-OCT-90	1
1004	03-OCT-90	1
1001	05-OCT-90	1
1002	06-OCT-90	1
1007	03-OCT-90	2
1002	04-OCT-90	1
1001	06-OCT-90	1

Name: Abdul Basit Bhat
Roll No: 102003121
Group: 2CO5
Assignment 7

Q6

Select Odate, Count(*) from Orders
group by Odate;

ODATE	COUNT (*)
04-OCT-90	2
05-OCT-90	1
06-OCT-90	2
03-OCT-90	5

Q7

Select Cname from Customers
where Cname like 'G%'
order by Cname
fetch first 1 rows only;

CNAME
Giovanni

Q8

Select * from Orders
where Snum=1002
order by Amt Desc
fetch first 1 rows only;

Name: Abdul Basit Bhat
Roll No: 102003121
Group: 2CO5
Assignment 7

Select * from Orders
where Snum=1007
order by Amt Desc
fetch first 1 rows only;

ONUM	AMT	ODATE	CNUM	SNUM
3005	5160.45	03-OCT-90	2003	1002

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ONUM	AMT	ODATE	CNUM	SNUM
3006	1098.16	03-OCT-90	2008	1007

[Download CSV](#)

Q9

select Distinct Odate,Snum,Amt from Orders
where Amt>3000;

ODATE	SNUM	AMT
06-OCT-90	1001	9891.88
03-OCT-90	1002	5160.45
05-OCT-90	1001	4273

Name: Abdul Basit Bhat
Roll No: 102003121
Group: 2CO5
Assignment 7

Q10

```
select * from (select comm,city,count(*) as c from salespeople  
group by city,comm  
order by c desc)  
where c>1;
```

no data found

/*Q1*/

select * from salespeople where city in (select city from Customers);

SNUM	SNAME	CITY	COMM
1001	Peel	London	12
1004	Motika	London	11
1002	Serres	Sanjose	13

select * from salespeople inner join Customers on salespeople.city=Customers.city;

SNUM	SNAME	CITY	COMM	CNUM	CNAME	CITY	SNUM
1001	Peel	London	12	2001	Hoffman	London	1001
1004	Motika	London	11	2001	Hoffman	London	1001
1002	Serres	Sanjose	13	2003	Liu	Sanjose	1002
1001	Peel	London	12	2006	Clemens	London	1001
1004	Motika	London	11	2006	Clemens	London	1001
1002	Serres	Sanjose	13	2008	Cisneros	Sanjose	1007

/*semi join should be used but it doesn't work in live sql*/

/*Q2*/

select S.Sname,cu.Cname from salespeople s,Customers cu where S.city=cu.city;

SNAME	CNAME
Peel	Hoffman
Motika	Hoffman
Serres	Liu
Peel	Clemens
Motika	Clemens
Serres	Cisneros

select Sname,cname from salespeople inner join Customers on salespeople.city=customers.city;

SNAME	CNAME
Peel	Hoffman
Motika	Hoffman
Serres	Liu
Peel	Clemens
Motika	Clemens
Serres	Cisneros

/*Q3*/

select sname from salespeople s where city in (Select city from customers cu where cu.city=s.city and cu.snum=s.snum);

SNAME
Peel
Serres

select sname,cname from salespeople s inner join customers cu on s.snum=cu.snum and s.city=cu.city;

SNAME	CNAME
Peel	Hoffman
Serres	Liu
Peel	Clemens

/*Q4*/

select Sname from salespeople s where city in (Select city from Customers cu where cu.city=s.city);

SNAME
Peel
Motika
Serres

/*Q5 Incomplete*/

select sname,cname from salesperson s join customers cu on s.snum<>cu.snum;

select sname from salespeople where snum in(select s.snum from salespeople s inner join customers cc on s.snum=cc.snum);

ANS

select s1.sname,c1.cname from salespeople s1,customers c1 where s1.snum in(select s.snum from salespeople s inner join customers cc on s.snum=cc.snum) and s1.snum=c1.snum;

/*Q6*/

select cname from customers cu where cu.snum not in (Select snum from salespeople);

no data found

/*Q7*/

select snum,onum highest_order from orders o where amt >= all (Select amt from orders oo where o.snum=oo.snum);

SNUM	HIGHEST_ORDER
1004	3002
1002	3005
1007	3006
1003	3009
1001	3011

/*Q8*/

select sname,onum from salespeople s,orders o where s.snum=o.snum and o.amt in (select max(amt) from orders group by snum);

SNAME	ONUM
Peel	3011
Serres	3005
Motika	3002
Rifkin	3006
Axelrod	3009

/*Q9*/

select snum,onum,amt from orders outer where amt > (select avg(amt) from orders where snum=outer.snum);

SNUM	ONUM	AMT
1002	3005	5160.45
1007	3006	1098.16
1001	3011	9891.88

/*Q10 Incom 1method done others not*/

```
select sname,snum from salespeople where snum in (select snum from customers having count(*) > 2 group by snum);
```

Joins

```
select snum from(select snum,count(*) cou from customers where cnum in (select cc.cnum from customers cc join customers ccc on (cc.snum=ccc.snum and cc.cnum <> ccc.cnum))group by snum) where cou>2;
```

Corelated subquery

Subquery 1

```
select * from customers cc where snum in (Select snum from customers ccc where cc.snum=ccc.snum and cc.cnum<>ccc.cnum);
```

subquery 2

```
select snum,count(*) from customers where cnum in(select cnum from customers cc where snum in (Select snum from customers ccc where cc.snum=ccc.snum and cc.cnum<>ccc.cnum)) group by snum;
```

subquery 3

```
select snum from (select snum,count(*) cou from customers where cnum in(select cnum from customers cc where snum in (Select snum from customers ccc where cc.snum=ccc.snum and cc.cnum<>ccc.cnum)) group by snum) where cou>2;
```