DATABASE MANAGEMENT SYSTEMS

(SLOT-D2)

LAB CAT-2

Name: **VIBHU KUMAR SINGH**
Reg. No: **19BCE0215**
Teacher: **Nancy Victor**

CREATION AND VALUE ENTRY:

```
create table Student(Ssn varchar2(2) primary key, SName varchar2(20) not null, SMajor varchar2(10) not null, Bdate
date);
insert into Student values('S1','Ann','Btech',TO_DATE('10/03/1999', 'DD/MM/YYYY'));
insert into Student values('S2','John','BCA',TO_DATE('11/04/2000', 'DD/MM/YYYY'));
insert into Student values('S3','James','MCA',TO_DATE('11/08/1998', 'DD/MM/YYYY'));
insert into Student values('S4','Samuel','Btech',TO_DATE('01/06/1999', 'DD/MM/YYYY'));

create table Course(CNo varchar2(2) primary key, CName varchar2(20) not null, CDept varchar2(10));
insert into Course values('C1','DBMS','SCOPE');
insert into Course values('C2','DS','SITE');
insert into Course values('C3','OS','SCOPE');

create table Enroll(ESsn varchar2(2) REFERENCES Student(Ssn),
ECNo varchar2(2) REFERENCES Course(CNo),
EQuarter varchar2(10) not null,
EGrade varchar2(10) not null);
insert into Enroll values('S1','C1','Fall','First');
insert into Enroll values('S2','C1','Winter','First');
insert into Enroll values('S1','C2','Winter','Second');
insert into Enroll values('S3','C3','Fall','First');
insert into Enroll values('S1','C3','Fall','Third');

create table Text(Book_ISBN varchar2(2) primary key,Book_title varchar2(100) not null, Publisher varchar2(20),
Author varchar2(10), Price number(4));
insert into Text values('I1', 'Book for Engineers', 'Wil', 'XYZ', 850);
insert into Text values('I2', 'Intoduction to Programming', 'Jayp', 'ABC', 900);
insert into Text values('I3', 'C programming', 'John', 'PQR', 600);
insert into Text values('I4', 'Engineers', 'Wil', 'AAA', 870);
insert into Text values('I5', 'World of programming', 'Hao', 'WWQ', 1200);

create table Book_Adoption(BCNo varchar2(2) references Course(CNo), BQuarter varchar2(10), BBook_ISBN
varchar2(2) references Text(Book_ISBN), Date_of_issue date);
insert into Book_Adoption values('C1','Fall','I1',TO_DATE('05/07/2020','DD/MM/YYYY'));
insert into Book_Adoption values('C1','Winter','I2',TO_DATE('05/08/2020','DD/MM/YYYY'));
insert into Book_Adoption values('C2','Winter','I3',TO_DATE('05/07/2020','DD/MM/YYYY'));
```

TABLES:

SSN	SNAME	SMAJOR	BDATE
S1	Ann	Btech	10-MAR-99
S2	John	BCA	11-APR-00
S3	James	MCA	11-AUG-98
S4	Samuel	Btech	01-JUN-99

CNO	CNAME	CDEPT
C1	DBMS	SCOPE
C2	DS	SITE
C3	OS	SCOPE

ESSN	ECNO	EQUARTER	EGRADE
S1	C1	Fall	First
S2	C1	Winter	First
S1	C2	Winter	Second
S3	C3	Fall	First
S1	C3	Fall	Third

BCNO	BQUARTER	BBOOK_ISBN	DATE_OF_ISSUE
C1	Fall	I1	05-JUL-20
C1	Winter	I2	05-AUG-20
C2	Winter	I3	05-JUL-20

BOOK_ISBN	BOOK_TITLE	PUBLISHER	AUTHOR	PRICE
I1	Book for Engineers	Wil	XYZ	850
I2	Intoduction to Programming	Jayp	ABC	900
I3	C programming	John	PQR	600
I4	Engineers	Wil	AAA	870
I5	World of programming	Hao	WWQ	1200

SCHEMA:

BOOK_ADOPTION		COURSE		ENROLL	
Table	⊞	**Table**	⊞	**Table**	⊞
Status: Valid		Status: Valid		Status: Valid	
Created 3 minutes ago		Created 34 minutes ago		Created 19 minutes ago	

STUDENT		TEXT	
Table	⊞	**Table**	⊞
Status: Valid		Status: Valid	
Created 35 minutes ago		Created 8 minutes ago	

A4)

select CNo,CName,CDept,EQuarter from Course INNER JOIN Enroll ON Course.CNo=Enroll.ECNo where EQuarter='Winter';

CNO	CNAME	CDEPT	EQUARTER
C1	DBMS	SCOPE	Winter
C2	DS	SITE	Winter

A5)

select Book_ISBN,Book_title,Author,date_of_issue FROM Text LEFT JOIN Book_Adoption ON Text.Book_ISBN=Book_Adoption.BBook_ISBN WHERE date_of_issue='05-July-2020';

BOOK_ISBN	BOOK_TITLE	AUTHOR	DATE_OF_ISSUE
I1	Book for Engineers	XYZ	05-JUL-20
I3	C programming	PQR	05-JUL-20

A6)

select Ssn,SName,ECNo,EQuarter From Student LEFT JOIN Enroll ON Student.Ssn=Enroll.ESsn where EQuarter='Fall';

SSN	SNAME	ECNO	EQUARTER
S1	Ann	C1	Fall
S3	James	C3	Fall
S1	Ann	C3	Fall

A7)

select AVG(Price) AS AVERAGE_PRICE,MAX(Price) as MAX_PRICE FROM Text;

AVERAGE_PRICE	MAX_PRICE
884	1200

A8)

select Book_ISBN,Book_title From Text where Price>ALL(select Price from Text where Publisher='Wil');

BOOK_ISBN	BOOK_TITLE
I2	Intoduction to Programming
I5	World of programming