

## DBMS LAB – 2

1.

```
CREATE TABLE AUTHOR(author_id INT,name VARCHAR(20),city VARCHAR(20),country VARCHAR(20));
CREATE TABLE PUBLISHER(publisher_id INT,name VARCHAR(20),city VARCHAR(20),country
VARCHAR(20));
CREATE TABLE CATALOG(book_id INT,author_id INT,publisher_id INT,category_id INT,year INT,price
INT);
CREATE TABLE CATEGORY(category_id INT,DESCRIPTION varchar(20));
CREATE TABLE ORDER_DETAILS(order_no INT,book_id INT,quantity INT);

ALTER TABLE PUBLISHER ADD PRIMARY KEY(publisher_id);
ALTER TABLE CATALOG ADD PRIMARY KEY(book_id,author_id,publisher_id,category_id);
ALTER TABLE CATEGORY ADD PRIMARY KEY(category_id);
ALTER TABLE ORDER_DETAILS ADD PRIMARY KEY(order_no,book_id);
```

Field	Type	Null	Key	Default	Extra
author_id	int	NO	PRI	NULL	
name	varchar(20)	YES		NULL	
city	varchar(20)	YES		NULL	
country	varchar(20)	YES		NULL	

Field	Type	Null	Key	Default	Extra
publisher_id	int	NO	PRI	NULL	
name	varchar(20)	YES		NULL	
city	varchar(20)	YES		NULL	
country	varchar(20)	YES		NULL	

DESC CATALOG;

Field	Type	Null	Key	Default	Extra
book_id	int	NO	PRI	NULL	
author_id	int	NO	PRI	NULL	
publisher_id	int	NO	PRI	NULL	
category_id	int	NO	PRI	NULL	
year	int	YES		NULL	
price	int	YES		NULL	

DESC ORDER\_DETAILS;

Field	Type	Null	Key	Default	Extra
order_no	int	NO	PRI	NULL	
book_id	int	NO	PRI	NULL	
quantity	int	YES		NULL	

```
INSERT INTO PUBLISHER
VALUES(1, 'Soma', 'Trichy', 'India'), (2, 'Sri', 'Trichy', 'India'), (3, 'Sanjeev', 'Trichy', 'India'), (4, 'Mano', 'Trichy', 'India'), (5, 'Nitin', 'Trichy', 'India')
-> ;
```

```
INSERT INTO CATALOG VALUES(1,1,1,1,2023,7200, 'SQL'), (2,2,2,2,2023,5200, 'C++'
'Cotlin');
```

```
INSERT INTO CATEGORY VALUES(1, 'V Good'), (2, 'V Good'), (3, 'Exellent'), (4, 'Good
```

```
INSERT INTO ORDER_DETAILS VALUES(1,1,200), (2,2,230), (3,3,300), (4,4,210), (5,5,100);
```

```
SELECT COUNT(author_id) FROM AUTHOR;
```

COUNT(author_id)
5

2.

```
CREATE TABLE Book(Acc_no INT, Yr_pib INT, title VARCHAR(20));
DESC Book;
```

Field	Type	Null	Key	Default	Extra
Acc_no	int	YES		NULL	
Yr_pib	int	YES		NULL	
title	varchar(20)	YES		NULL	

```
INSERT INTO Book VALUES(734216,1982, 'Algorithm design'), (237235,1995, 'Database
systems'), (631523,1992, 'Compiler design'), (543211,1991, 'programming'), (376112,1992, 'Machine
design');
```

```
SELECT * FROM Book;
```

Acc_no	Yr_pib	title
237235	1995	Database systems
376112	1992	Machine design
543211	1991	programming
631523	1992	Compiler design
734216	1982	Algorithm design

```
SELECT title, Acc_no FROM Book;
```

title	Acc_no
Database systems	237235
Machine design	376112
programming	543211
Compiler design	631523
Algorithm design	734216

SELECT \* FROM Book WHERE Yr\_pib =1992;

Acc_no	Yr_pib	title
376112	1992	Machine design
631523	1992	Compiler design

SELECT \* FROM Book WHERE Acc\_no>=56782;

Acc_no	Yr_pib	title
237235	1995	Database systems
376112	1992	Machine design
543211	1991	programming
631523	1992	Compiler design
734216	1982	Algorithm design

SELECT Acc\_no AS SERIAL\_NO  
-> FROM Book;

SERIAL_NO
237235
376112
543211
631523
734216

SELECT Yr\_pib AS YEAR FROM Book;

YEAR
1995
1992
1991
1992
1982

3.

CREATE TABLE branch(branch\_name VARCHAR(20),branch\_city VARCHAR(20),assets VARCHAR(20));

CREATE TABLE customer(customer\_name VARCHAR(20),customer\_city VARCHAR(20),customer\_street VARCHAR(20));

```
CREATE TABLE account(account_number INT,branch_name VARCHAR(20),balance INT);
```

```
CREATE TABLE loan(loan_number INT,branch_name VARCHAR(20),amount INT);
```

```
CREATE TABLE depositor(customer_name VARCHAR(20),account_number INT);
```

```
CREATE TABLE borrower(customer_name VARCHAR(20),loan_number INT);
```

```
SELECT title,Acc_no FROM Book;
```

title	Acc_no
Database systems	237235
Machine design	376112
programming	543211
Compiler design	631523
Algorithm design	734216

```
SELECT * FROM Book WHERE Yr_pib =1992;
```

Acc_no	Yr_pib	title
376112	1992	Machine design
631523	1992	Compiler design

```
SELECT * FROM Book WHERE Acc_no>=56782;
```

Acc_no	Yr_pib	title
237235	1995	Database systems
376112	1992	Machine design
543211	1991	programming
631523	1992	Compiler design
734216	1982	Algorithm design

```
SELECT Acc_no AS SERIAL_NO FROM Book;
```

SERIAL_NO
237235
376112
543211
631523
734216

```
SELECT Yr_pib AS YEAR FROM Book;
```

YEAR
------

Date – 10/08/2023  
Time – 2:30 – 5:00pm

Sanjiv Kannaa Jeganathan  
106121116

```
| 1995 |  
| 1992 |  
| 1991 |  
| 1992 |  
| 1982 |  
+-----+
```

DESC Book;

```
+-----+-----+-----+-----+  
| Field | Type      | Null | Key | Default | Extra |  
+-----+-----+-----+-----+  
| Acc_no | int       | NO   | PRI | NULL    |      |  
| Yr_pib | int       | NO   | PRI | NULL    |      |  
| title  | varchar(20) | YES  |     | NULL    |      |  
+-----+-----+-----+-----+
```

```
+-----+-----+-----+-----+  
| Field      | Type      | Null | Key | Default | Extra |  
+-----+-----+-----+-----+  
| branch_name | varchar(20) | YES  |     | NULL    |      |  
| branch_city | varchar(20) | YES  |     | NULL    |      |  
| assets      | varchar(20) | YES  |     | NULL    |      |  
+-----+-----+-----+-----+
```

SELECT COUNT(author\_id) FROM AUTHOR;

```
+-----+  
| COUNT(author_id) |  
+-----+  
| 5 |  
+-----+
```

INSERT INTO branch VALUES('Soma','Trichy','GGGG');

INSERT INTO branch VALUES('San','Trichy','GGG');

INSERT INTO branch VALUES('Nitin','Trichy','GGGGG');

INSERT INTO branch VALUES('Jam','Trichy','GGGG');

INSERT INTO branch VALUES('Sri','Trichy','GGG');

INSERT INTO customer VALUES ('Soma','Trichy1','GGGG'), ('San','Trichy2','GGG'),  
('Nitin','Trichy1','GGGGG'), ('Sri','Trichy2','GGG'), ('Jam','Trichy1','GGGG');

INSERT INTO account VALUES(1,'Soma',32000),(2,'San',12000),(3,'Nitin',23000);

INSERT INTO loan VALUES (1,'Soma',2000), (2,'San',1000), (3,'Nitin',3000), (4,'Sri',50),  
(5,'Jam',2500);

INSERT INTO depositor VALUES('Soma',1),('San',2),('Nitin',3),('Sri',4),('Jam',5);

INSERT INTO borrower VALUES('Soma',1),('San',2),('Nitin',3),('Sri',4),('Jam',5);

SELECT amount FROM loan WHERE amount>=12000;  
Empty Set

Date – 10/08/2023  
Time – 2:30 – 5:00pm

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106121116

```
SELECT branch_name FROM branch WHERE branch_city='Trichy';
```

branch_name
Soma
San
Nitin
Jam
Sri

```
SELECT customer_name FROM depositor WHERE account_number=1;
```

customer_name
Soma

```
SELECT customer_name FROM customer WHERE customer_name LIKE 'S%';
```

customer_name
Soma
San
Sri
Soma
San
Sri