ASSIGNMENT - II

TITLE :

SQL Queries: Design and Develop SQL DDL statements which demonstrate the use of SQL objects such as Table, View, Index, Sequence, Synonym, different constraints etc.

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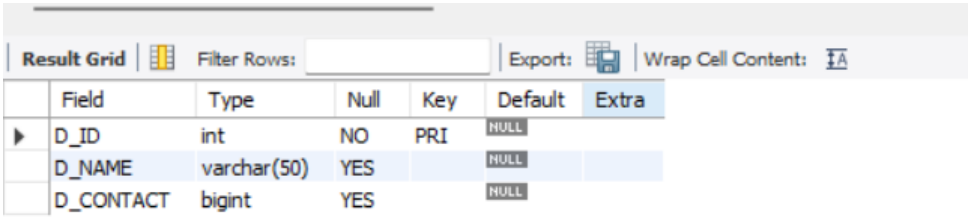
QUERIES :

1) Create Table :

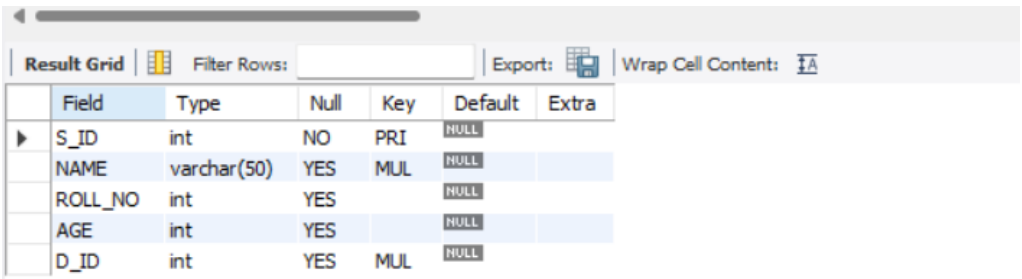
```
CREATE DATABASE SDS;
USE SDS;

CREATE TABLE DEPARTMENT(
D_ID INT PRIMARY KEY,
D_NAME VARCHAR(50),
D_CONTACT BIGINT
);
DESC DEPARTMENT;
```



Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Field	Type	Null	Key	Default	Extra
D_ID	int	NO	PRI	NULL	
D_NAME	varchar(50)	YES		NULL	
D_CONTACT	bigint	YES		NULL	

```
CREATE TABLE STUDENT(
S_ID INT PRIMARY KEY,
NAME VARCHAR(50),
ROLL_NO INT,
AGE INT,
D_ID INT,
FOREIGN KEY (D_ID) REFERENCES DEPARTMENT(D_ID)
);
DESC STUDENT;
```

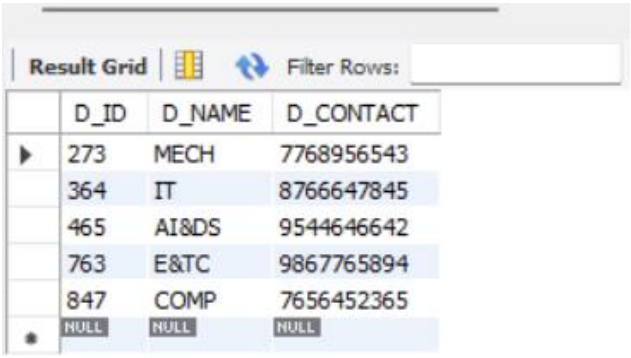


Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Field	Type	Null	Key	Default	Extra
S_ID	int	NO	PRI	NULL	
NAME	varchar(50)	YES	MUL	NULL	
ROLL_NO	int	YES		NULL	
AGE	int	YES		NULL	
D_ID	int	YES	MUL	NULL	

2) Insert Values :

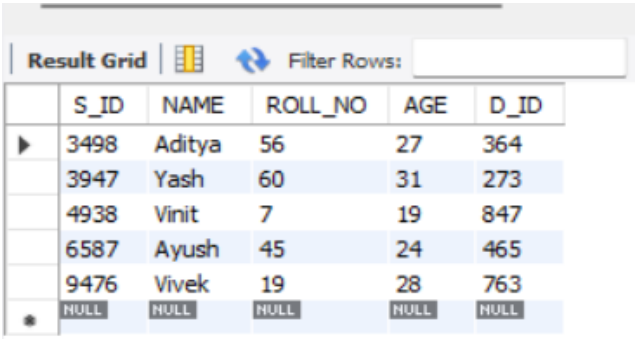
```
INSERT INTO DEPARTMENT VALUES
(465, 'AI&DS', 9544646642),
(847, 'COMP', 7656452365),
(364, 'IT', 8766647845),
(763, 'E&TC', 9867765894),
(273, 'MECH', 7768956543);

SELECT * FROM DEPARTMENT;
```



Result Grid | Filter Rows:

D_ID	D_NAME	D_CONTACT
273	MECH	7768956543
364	IT	8766647845
465	AI&DS	9544646642
763	E&TC	9867765894
847	COMP	7656452365
NULL	NULL	NULL

```
INSERT INTO STUDENT VALUES
(6587, 'Ayush', 45, 24, 465),
(4938, 'Vinit', 07, 19, 847),
(3498, 'Aditya', 56, 27, 364),
(9476, 'Vivek', 19, 28, 763),
(3947, 'Yash', 60, 31, 273);

SELECT * FROM STUDENT;
```



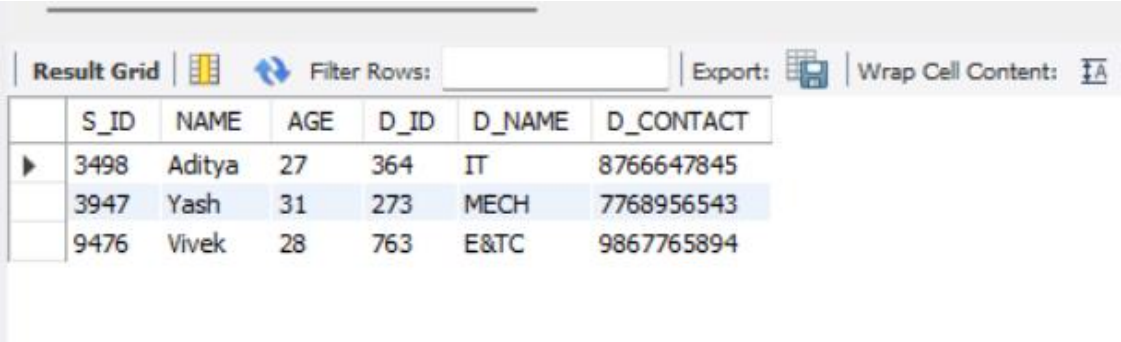
Result Grid | Filter Rows:

S_ID	NAME	ROLL_NO	AGE	D_ID
3498	Aditya	56	27	364
3947	Yash	60	31	273
4938	Vinit	7	19	847
6587	Ayush	45	24	465
9476	Vivek	19	28	763
NULL	NULL	NULL	NULL	NULL

3) View :

```
CREATE VIEW VIEW_SD as
SELECT s.S_ID, s.NAME, s.AGE, d.D_ID, d.D_NAME, d.D_CONTACT
FROM STUDENT as s
INNER JOIN DEPARTMENT d
```

```
ON s.D_ID = d.D_ID
WHERE AGE > 24;

SELECT * FROM VIEW_SD;
```

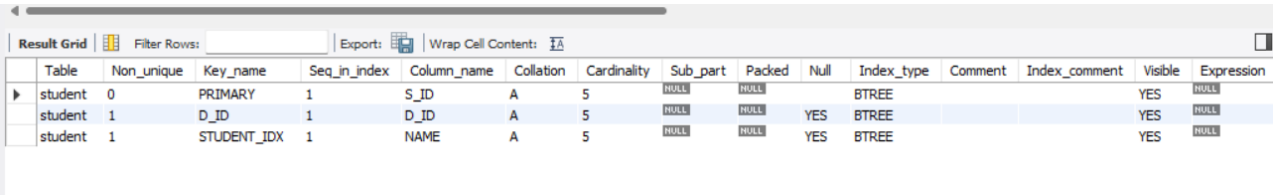


Result Grid | Filter Rows: | Export: | Wrap Cell Content:

S_ID	NAME	AGE	D_ID	D_NAME	D_CONTACT
3498	Aditya	27	364	IT	8766647845
3947	Yash	31	273	MECH	7768956543
9476	Vivek	28	763	E&TC	9867765894

4) Index :

```
CREATE INDEX STUDENT_IDX ON STUDENT(NAME);
SHOW INDEX FROM STUDENT;
```

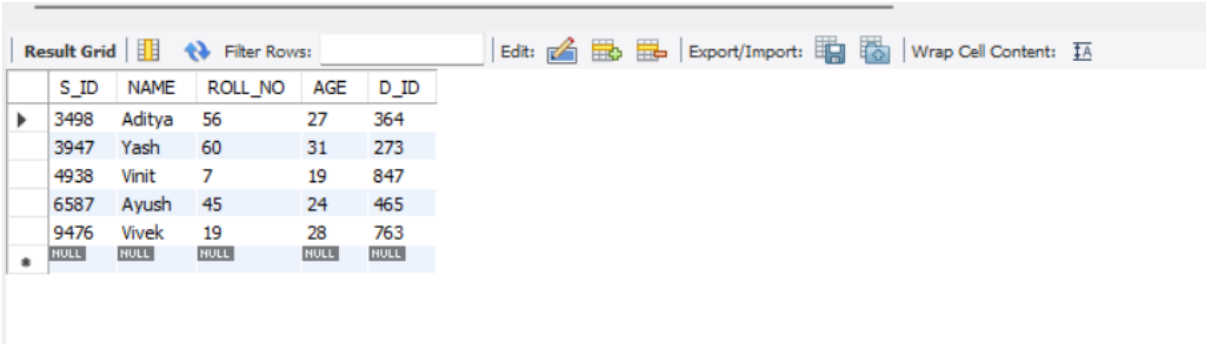


Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Table	Non_unique	Key_name	Seq_in_index	Column_name	Collation	Cardinality	Sub_part	Packed	Null	Index_type	Comment	Index_comment	Visible	Expression
student	0	PRIMARY	1	S_ID	A	5	NULL	NULL		BTREE			YES	NULL
student	1	D_ID	1	D_ID	A	5	NULL	NULL	YES	BTREE			YES	NULL
student	1	STUDENT_IDX	1	NAME	A	5	NULL	NULL	YES	BTREE			YES	NULL

5) Sequence :

```
CREATE TABLE STUDENT1(
S_ID INT AUTO_INCREMENT PRIMARY KEY,
NAME VARCHAR(50),
ROLL_NO INT,
AGE INT,
D_ID INT,
FOREIGN KEY (D_ID) REFERENCES DEPARTMENT(D_ID)
);

INSERT INTO STUDENT1 VALUES
(6587, 'Ayush', 45, 24, 465),
(4938, 'Vinit', 07, 19, 847),
(3498, 'Aditya', 56, 27, 364),
(9476, 'Vivek', 19, 28, 763),
(3947, 'Yash', 60, 31, 273);

SELECT * FROM STUDENT1;
```

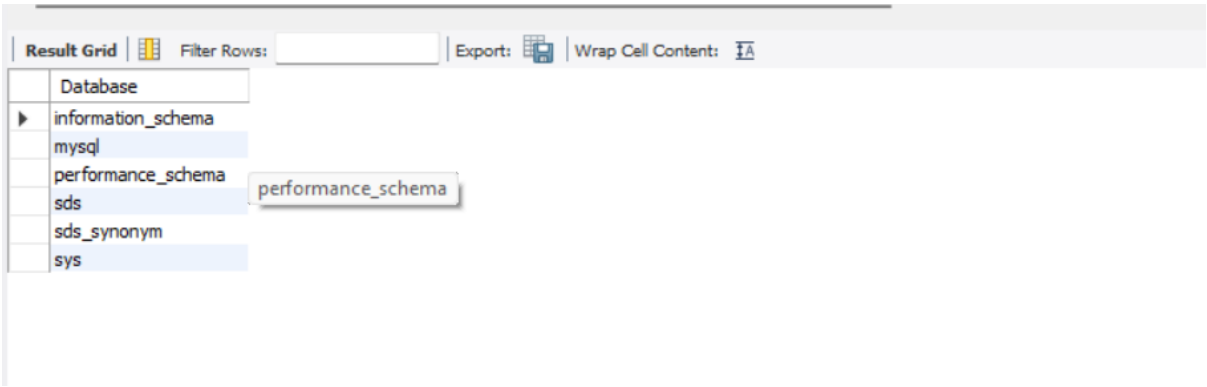


Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

S_ID	NAME	ROLL_NO	AGE	D_ID
3498	Aditya	56	27	364
3947	Yash	60	31	273
4938	Vinit	7	19	847
6587	Ayush	45	24	465
9476	Vivek	19	28	763
NULL	NULL	NULL	NULL	NULL

6) Synonym :

CALL sys.create_synonym_db('sds','sds_synonym');
show databases;



Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Database
information_schema
mysql
performance_schema
sds
sds_synonym
sys

performance_schema