

— SQL Assignment Ch5 Statements

—Create Table

— table name STUDENTS

— regno (PK)

— name(NN)

—semester

— DOB

CREATE TABLE STUDENTS

```
(  
regno varchar(10) PRIMARY KEY NOT NULL,  
name varchar(20) NOT NULL,  
semester number(02),  
DOB date,  
phone number(12)  
);
```

— declare Primary key first , then not null

— don't miss semicolon

—Create table name , BOOKS

— bookno(PK)

—bname

—author

CREATE TABLE BOOKS (

```
bookno number(6) PRIMARY KEY NOT NULL,  
bname VARCHAR(20)  
author varchar(20)  
);
```

— declare Primary key first , then not null

— don't miss semicolon at end

—CREATE TABLE name LIBRARY

—regno (FK from students)

—boono (FK from books)

— DOI - Date of issue

— DOR - Date of return

CREATE TABLE LIBRARY

```
(
regno varchar(10) REFERENCES students (regno),
bookno number(6) REFERENCES books (bookno)
DOI Date ,
DOR Date
)
```

— don't miss semicolon at end

— for references enter data type and enter REFERENCES mastertablename (mastercolname)

— same data type as in source

— insert 5 values into each table

INSERT INTO students

Values ('001','Swaroop',8,'06-April-1997',9916160739);

— ~~TABLE~~ there is no table keyword in insert statement

—MUST USE VALUES KEYWORD

insert into students VALUES

```
(
'002','Chandini',8,'06-April-1997',1234567890);
```

Insert into students values

```
( '003','Akshay',8,'31-March-2022',1234567890);
```

insert into students values

```
('004','Kiran',8,'01-January-1996',1234567890);
```

insert into students values

```
('005','GuruDev',8,'01-January-1996',1234567890);
```

insert into books values

```
( 1,'Think Python','Unknown');
```

— don't forget semicolon

insert into books values

```
( 2,'Statistics ','Unknown');
```

insert into books values

```
( 3,'SQL ','Mahesh');
```

insert into books values

```
( 4,'HTML ','Niranjan');
```

insert into books values

```
( 5,'CSS ','SiddharthNiranjan');
```

Insert into library values

```
('001',1,'01-January-2022','31-January-2022');
```

Insert into library values

```
('002',2,'01-January-2022','31-January-2022');
```

Insert into library values

```
('003',3,'01-January-2022','31-January-2022');
```

Insert into library values

```
('004',4,'01-January-2022','31-January-2022');
```

Insert into library values

```
('005',5,'01-January-2022','31-January-2022');
```

— Diff bw

— Truncate Vs Delete Vs Drop

	Truncate	Drop	Delete
Type of statement	DDL	DDL	DML
Deals with	Structure of table	Both data and structure of table	Data in table
	Removes all rows of record permanently	removes both data and structure of table permanently	Deletes all / some whichever records we want to delete from
Commit / Rollback (undone)	Can't	Can't	Can
Syntax	Truncate table	drop table	Delete from

table_name;	table_name;	table_name ; or delete from table_name where col_no = value ;
-------------	-------------	---

Difference between Char and Varchar

	Char	Varchar
What they are in SQL	Datatypes	Datatypes
It stores	Fixed length character data	Variable length character data
Can store	Alphanumeric data	Alphanumeric data
Memory allocation	Memory will be allocate of size given and fixed length can't be altered	
Example	Name char(6); "TOM " , remaining three non reusable memory , makes query also diffocult	name varchar(6); "TOM" , only first 3 bytes used , remaining 3 null , don't occupy memory space , memory not wasted ,
Can store	2000 character	4000/8000 character

- create a table Uniquename add names and to find repeating pattern

```
Create table uniquename (
name varchar(20)
);
```

- no semicolon at end of 20)

```
insert into uniquename
```

```
Values ( '&name');
```

- input names manually

```
—
```

allen

baba
babu
gagan
lalitha
lilly
mamatha
sams
shashank
shashi
william

```

Or insert into uniquename Values ('lilly');
insert into uniquename Values ('babu');
insert into uniquename Values ('gagan');
insert into uniquename Values ('mamatha');
insert into uniquename Values ('shashank');

```

```

Select * from uniquename;
select * from uniquename where name like '%l%l%';

select * from uniquename where name like '%b%b%';

select * from uniquename where name like '%g%g%';

select * from uniquename where name like '%m%m%';

select * from uniquename where name like '%s%s%';
— change single " quotes in editor

```

bs2ipcul0apon0jufi80lite.db2.cloud.ibm.com

Ass1.sql (SQL) - myCompiler Db2 - IBM Cloud IBM Db2 on Cloud Run SQL - IBM Db2 on Cloud

Ass1.sql x Script summary

```
1 -- create a table
2 -- insert some values
3 -- fetch some values
4 Create table uniqueness (
5   name varchar(20)
6 );
7 insert into uniqueness Values ('lilly');
8 insert into uniqueness Values ('babu');
9 insert into uniqueness Values ('gagan');
10 insert into uniqueness Values ('mamatha');
11 insert into uniqueness Values ('shashank');
12 select * from uniqueness;
13 select * from uniqueness where name like '%l%l%';
14
15 select * from uniqueness where name like '%b%b%';
16
17 select * from uniqueness where name like '%g%g%';
18
19 select * from uniqueness where name like '%m%m%';
20
21 select * from uniqueness where name like '%s%s%';
22
23
```

Run selected Remember my selection

Result - Apr 3, 2022 8:31:20 AM

Run time: 0.004 s

Result set 1

NAME
shashank
mamatha
gagan
babu
lilly

8:38 AM Sun 3 Apr bs2ipcul0apon0jufi80lite.db2.cloud.ibm.com

(SQL) - myCom... Db2 - IBM Cloud IBM Db2 on Cloud Run SQL - IBM... SQL0000 - SQL... LIKE Operator

*Ass1.sql x Script summary

```
1 -- create a table
2 -- insert some values
3 -- fetch some values
4 Create table uniqueness (
5   name varchar(20)
6 );
7 insert into uniqueness Values ('lilly');
8 insert into uniqueness Values ('babu');
9 insert into uniqueness Values ('gagan');
10 insert into uniqueness Values ('mamatha');
11 insert into uniqueness Values ('shashank');
12 select * from uniqueness;
13 select * from uniqueness where name like '%l%l%';
14
15 select * from uniqueness where name like '%b%b%';
16
17 select * from uniqueness where name like '%g%g%';
18
19 select * from uniqueness where name like '%m%m%';
20
21 select * from uniqueness where name like '%s%s%';
22
23
```

Run selected Remember my selection

Result - Apr 3, 2022 8:38:31 AM

Summary: Database: crn:v1:bluemixpublic:...

Run activity: Authorization ID: yhg97202

Result: Run time: 0.004 s

select * from uniqueness where name like

Result set 1

NAME
lilly

8:38 AM Sun 3 Apr bs2ipcul0apon0jufi80lite.db2.cloud.ibm.com

(SQL) - myCom... Db2 - IBM Cloud IBM Db2 on Cloud Run SQL - IBM... SQL0000 - SQL... LIKE Operator

*Ass1.sql x Script summary

```
1 -- create a table
2 -- insert some values
3 -- fetch some values
4 Create table uniqueness (
5   name varchar(20)
6 );
7 insert into uniqueness Values ('lilly');
8 insert into uniqueness Values ('babu');
9 insert into uniqueness Values ('gagan');
10 insert into uniqueness Values ('mamatha');
11 insert into uniqueness Values ('shashank');
12 select * from uniqueness;
13 select * from uniqueness where name like '%l%l%';
14
15 select * from uniqueness where name like '%b%b%';
16
```

Run selected Remember my selection

Result - Apr 3, 2022 8:38:42 AM

Summary: Database: crn:v1:bluemixpublic:...

Run activity: Authorization ID: yhg97202

Result: Run time: 0.004 s

select * from uniqueness where name like

Result set 1

NAME
babu

8:39 AM Sun 3 Apr bs2ipcul0apon0jufi80lite.db2.cloud.ibm.com

AA

Ass1.sql

Script summary

Result - Apr 3, 2022 8:39:11 AM

Summary: Database: crn:v1:bluemix:public:...

Run activity: Authorization ID: yhg97202

Result: Run time: 0.003 s

select * from uniqueness where name like

Result set 1

NAME

mamatha

1 -- create a table

2 -- insert some values

3 -- fetch some values

4 Create table uniqueness (

5 name varchar(20)

6);

7 insert into uniqueness Values ('lilly');

8 insert into uniqueness Values ('babu');

9 insert into uniqueness Values ('gagan');

10 insert into uniqueness Values ('mamatha');

11 insert into uniqueness Values ('shashank');

12 select * from uniqueness;

13 select * from uniqueness where name like '%l%l%';

14

15 select * from uniqueness where name like '%b%b%';

16

17 select * from uniqueness where name like '%g%g%';

18

19 select * from uniqueness where name like '%m%m%';

20

21 select * from uniqueness where name like '%s%s%';

22

23

Run selected

Remember my selection

Ass1.sql

Script summary

Result - Apr 3, 2022 8:38:42 AM

Summary: Database: crn:v1:bluemix:public:...

Run activity: Authorization ID: yhg97202

Result: Run time: 0.004 s

select * from uniqueness where name like

Result set 1

NAME

babu

1 -- create a table

2 -- insert some values

3 -- fetch some values

4 Create table uniqueness (

5 name varchar(20)

6);

7 insert into uniqueness Values ('lilly');

8 insert into uniqueness Values ('babu');

9 insert into uniqueness Values ('gagan');

10 insert into uniqueness Values ('mamatha');

11 insert into uniqueness Values ('shashank');

12 select * from uniqueness;

13 select * from uniqueness where name like '%l%l%';

14

15 select * from uniqueness where name like '%b%b%';

16

17 select * from uniqueness where name like '%g%g%';

18

19 select * from uniqueness where name like '%m%m%';

20

21 select * from uniqueness where name like '%s%s%';

22

23

Run selected

Remember my selection