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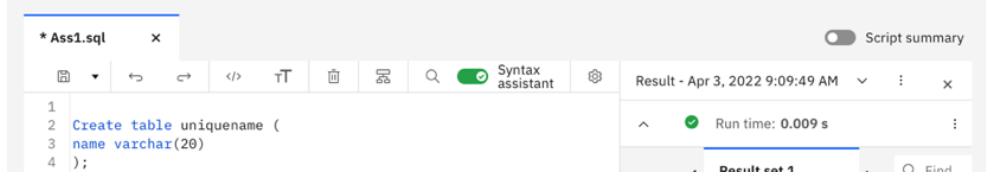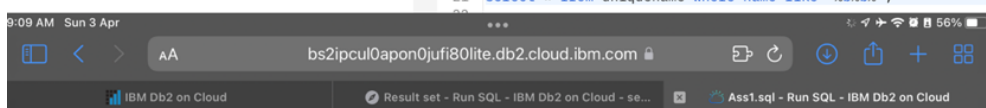
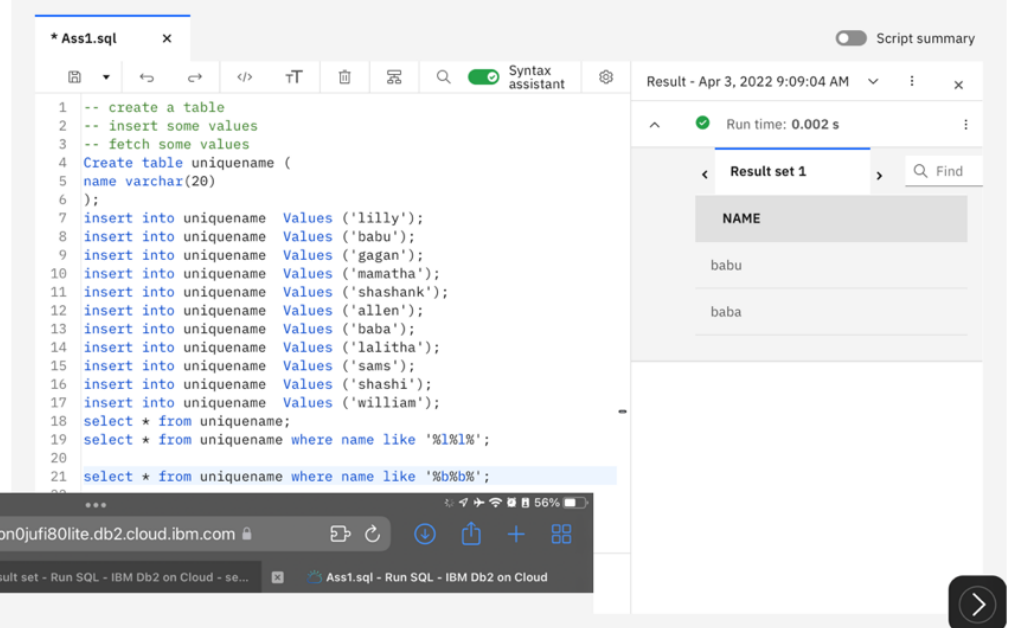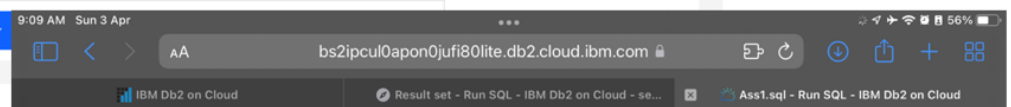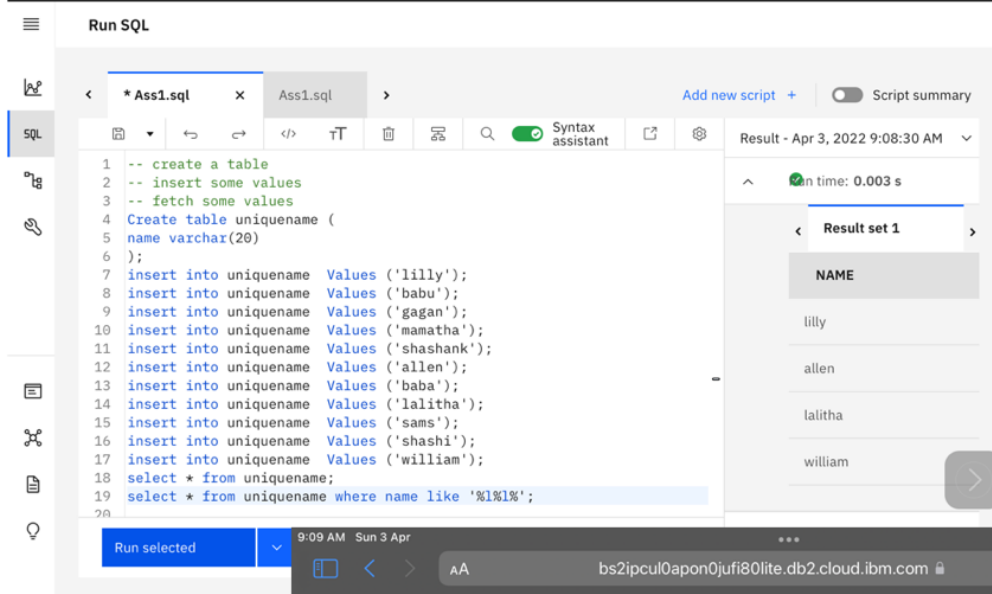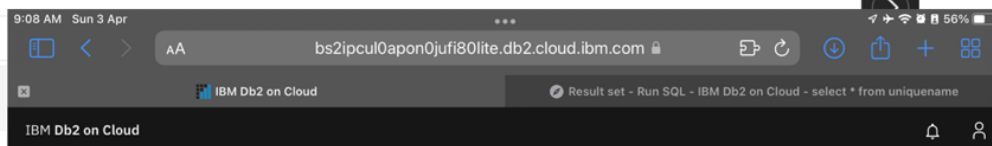select * from uniquename where name like '%b%b%';

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

NAME
shashank
mamatha
gagan
babu
lilly
allen
baba
lalitha
sams
shashi

9:08 AM Sun 3 Apr   56%

bs2ipcul0apon0jufi80lite.db2.cloud.ibm.com

IBM Db2 on Cloud   Result set - Run SQL - IBM Db2 on Cloud - select * from uniquename

IBM Db2 on Cloud

Run SQL

< *** Ass1.sql** ×   Ass1.sql >   Add new script +   Script summary

Syntax assistant   Result - Apr 3, 2022 9:08:30 AM

```
1  -- create a table
2  -- insert some values
3  -- fetch some values
4  Create table uniquename (
5  name varchar(20)
6  );
7  insert into uniquename  Values ('lilly');
8  insert into uniquename  Values ('babu');
9  insert into uniquename  Values ('gagan');
10 insert into uniquename  Values ('mamatha');
11 insert into uniquename  Values ('shashank');
12 insert into uniquename  Values ('allen');
13 insert into uniquename  Values ('baba');
14 insert into uniquename  Values ('lalitha');
15 insert into uniquename  Values ('sams');
16 insert into uniquename  Values ('shashi');
17 insert into uniquename  Values ('william');
18 select * from uniquename;
19 select * from uniquename where name like '%l%l%';
20
```

Run selected

On time: 0.003 s

< **Result set 1** >

NAME
lilly
allen
lalitha
william

9:09 AM Sun 3 Apr   56%

bs2ipcul0apon0jufi80lite.db2.cloud.ibm.com

IBM Db2 on Cloud   Result set - Run SQL - IBM Db2 on Cloud - se...   Ass1.sql - Run SQL - IBM Db2 on Cloud

* Ass1.sql ×   Script summary

Syntax assistant   Result - Apr 3, 2022 9:09:04 AM ×

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

Run time: 0.002 s

< **Result set 1** >   Find

NAME
babu
baba

9:09 AM Sun 3 Apr   56%

bs2ipcul0apon0jufi80lite.db2.cloud.ibm.com

IBM Db2 on Cloud   Result set - Run SQL - IBM Db2 on Cloud - se...   Ass1.sql - Run SQL - IBM Db2 on Cloud

* Ass1.sql ×   Script summary

Syntax assistant   Result - Apr 3, 2022 9:09:49 AM ×

```
1
2  Create table uniquename (
3  name varchar(20)
4  );
```

Run time: 0.009 s

< **Result set 1** >   Find

NAME

mamatha

9:09 AM Sun 3 Apr   56%

bs2ipcul0apon0jufi80lite.db2.cloud.ibm.com

IBM Db2 on Cloud   Result set - Run SQL - IBM Db2 on Cloud - se...   Ass1.sql - Run SQL - IBM Db2 on Cloud

* Ass1.sql   Script summary

Syntax assistant

Result - Apr 3, 2022 9:09:15 AM

```
 1  -- create a table
 2  -- insert some values
 3  -- fetch some values
 4  Create table uniquename (
 5  name varchar(20)
 6  );
 7  insert into uniquename  Values ('lilly');
 8  insert into uniquename  Values ('babu');
 9  insert into uniquename  Values ('gagan');
10  insert into uniquename  Values ('mamatha');
11  insert into uniquename  Values ('shashank');
12  insert into uniquename  Values ('allen');
13  insert into uniquename  Values ('baba');
14  insert into uniquename  Values ('lalitha');
15  insert into uniquename  Values ('sams');
16  insert into uniquename  Values ('shashi');
17  insert into uniquename  Values ('william');
18  select * from uniquename;
19  select * from uniquename where name like '%l%l%';
20
21  select * from uniquename where name like '%b%b%';
22
23  select * from uniquename where name like '%g%g%';
24
25  select * from uniquename where name like '%m%m%';
```

Run time: 0.004 s

Result set 1   Find

NAME

gagan

Run selected   Remember my selection

9:10 AM Sun 3 Apr   56%

bs2ipcul0apon0jufi80lite.db2.cloud.ibm.com

IBM Db2 on Cloud   Result set - Run SQL - IBM Db2 on Cloud - se...   Ass1.sql - Run SQL - IBM Db2 on Cloud

* Ass1.sql   Script summary

Syntax assistant

Result - Apr 3, 2022 9:10:02 AM

```
 1
 2  Create table uniquename (
 3  name varchar(20)
 4  );
 5  insert into uniquename  Values ('lilly');
 6  insert into uniquename  Values ('babu');
 7  insert into uniquename  Values ('gagan');
 8  insert into uniquename  Values ('mamatha');
 9  insert into uniquename  Values ('shashank');
10  insert into uniquename  Values ('allen');
11  insert into uniquename  Values ('baba');
12  insert into uniquename  Values ('lalitha');
13  insert into uniquename  Values ('sams');
14  insert into uniquename  Values ('shashi');
15  insert into uniquename  Values ('william');
16  select * from uniquename;
17  select * from uniquename where name like '%l%l%';
18
19  select * from uniquename where name like '%b%b%';
20
21  select * from uniquename where name like '%g%g%';
22
23  select * from uniquename where name like '%m%m%';
24
25  select * from uniquename where name like '%s%s%';
```

Run time: 0.004 s

Result set 1   Find

NAME

shashank

sams

shashi

Run selected   Remember my selection