EXPERIMENT 1& 2:

Link:

Experiment 1:

https://www.youtube.com/watch?v=gGLnmHdKCW0

Experiment 2:

https://www.youtube.com/watch?v=NS46q3yeVCU

DESCRIPTION:

An SQL relation is defined using thecreate tablecommand:

```
\label{eq:create table r and points} \begin{split} \text{create table r } (A_1D_1,\,A_2D_2,\,...,\,A_nD_n,\\ &\quad \text{(integrity-constraint}_1),\\ &\quad ...,\\ &\quad \text{(integrity-constraint}_k)) \end{split}
```

r is the name of the relation

eachA_i is an attribute name in the schema of relation r

 D_{i} is the data type of values in the domain of attribute A_{i}

Unique Key

The unique constraint doesn't allow duplicate values in a column. If the unique constraint encompasses two or more columns, no two equal combinations are allowed.

Check

Check constraint is used to restrict the values before inserting into a table.

Primary Key

The key column with which we can identify the entire Table is called as a primary key column.

A primary key is a combination of a Unique and a Not Null constraint, it will not allow null and duplicate values.

A table can have only one primary key. A primary key can be declared on two or more columns as a Composite Primary Key.

ALTER TABLE

Syntax

Adding a column to table:

Alter table add <new column name><type>

Modifying the column with new datatype:

Alter table modify<column name><new type>

Dropping a column:

Alter table drop column <column name>

Renaming column Name:

Alter table rename column <column name> to < new column name>

Rename Table:

Rename <tablename>to <new_tablename>

Add Constraint to Table:

ALTER TABLE ADD CONSTRAINT <constraint name> <constraint type>

(column name);

Alter table <modify ><column name><constraint type>

ALTER TABLE DROP CONSTRAINT <constraint name>

CODE:

EXPERIMENT 1:

SQL> create table Course_ur14cs290(coursecode number(2) not null,coursename varchar2(30),syllabus varchar2(60));

Table created.
SQL> create table Batch_ur14cs290(batchcode number(3) not null, coursecode number(2) not null, startingdate date not null,duration number(3) not null, coursefees number(10,2) not null);
Table created.
SQL> create table Enquiry_ur14cs290(enquiryno number(8) not null,fname varchar2(30),sname varchar2(30), coursecode number(2),street varchar2(30),city varchar2(30),pincode number(6), phone number(10),enquirydate date not null,en_st char(1));
Table created.
SQL> create table Enrollment_ur14cs290(rollno number(8) not null, enquiryno number(8), batchcode number(5), enrollmentdate date not null);
Table created.
SQL> create table Feespaid_ur14cs290(rollno number(8) not null,feespaiddate date not null,chequeno varchar2(10),bankname varchar2(30),amount number(10,2));
Table created.
SQL> insert into Batch_ur14cs290 values (&batchcode,&coursecode,'&startingdate',&duration,&coursefess);
Enter value for batchcode: 101

Enter value for coursecode: 20 Enter value for startingdate: 01-Jan-14 Enter value for duration: 30 Enter value for coursefess: 5000 old 1: insert into Batch_ur14cs290 values (&batchcode,&coursecode,'&startingdate',&duration,&coursefess) new 1: insert into Batch_ur14cs290 values (101,20,'01-Jan-14',30,5000) 1 row created. SQL > /Enter value for batchcode: 102 Enter value for coursecode: 10 Enter value for startingdate: 20-Jan-14 Enter value for duration: 20 Enter value for coursefess: 4000 old 1: insert into Batch_ur14cs290 values (&batchcode,&coursecode,'&startingdate',&duration,&coursefess) new 1: insert into Batch_ur14cs290 values (102,10,'20-Jan-14',20,4000) 1 row created. SQL>/ Enter value for batchcode: 103 Enter value for coursecode: 10

Enter value for startingdate: 01-Apr-14 Enter value for duration: 20 Enter value for coursefess: 4000 old 1: insert into Batch_ur14cs290 values (&batchcode,&coursecode,'&startingdate',&duration,&coursefess) new 1: insert into Batch_ur14cs290 values (103,10,'01-Apr-14',20,4000) 1 row created. SQL > /Enter value for batchcode: 104 Enter value for coursecode: 10 Enter value for startingdate: 25-Oct-14 Enter value for duration: 20 Enter value for coursefess: 4000 old 1: insert into Batch_ur14cs290 values (&batchcode,&coursecode,'&startingdate',&duration,&coursefess) new 1: insert into Batch_ur14cs290 values (104,10,'25-Oct-14',20,4000) 1 row created. SQL> insert into Enquiry_ur14cs290 values (&eno, '&fname', '&sname', &coursecode, '&street', '&city', &pincode, &phone, '&enquiry', '&en'); Enter value for eno: 110001

Enter value for fname: Anil

Enter value for sname: Sharma

Enter value for coursecode: 10

Enter value for street: Ramnagar

Enter value for city: Cbe

Enter value for pincode: 641114

Enter value for phone: 9486453331

Enter value for enquiry: 20-Jan-14

Enter value for en: Y

old 1: insert into Enquiry_ur14cs290 values

(&eno, '&fname', '&sname', &coursecode, '&street', '&city', &pincode, &phone, '&enquiry', '&en')

new 1: insert into Enquiry_ur14cs290 values

(110001, 'Anil', 'Sharma', 10, 'Ramnagar', 'Cbe', 641114, 9486453331, '20-Jan-14', 'Y')

1 row created.

SQL > /

Enter value for eno: 110002

Enter value for fname: Sachin

Enter value for sname: Nimje

Enter value for coursecode: 20

Enter value for street: Gandhi nagar

Enter value for city: ERD

Enter value for pincode: 641142

Enter value for phone: 9234567890

Enter value for enquiry: 25-Oct-14

Enter value for en: N

old 1: insert into Enquiry_ur14cs290 values (&eno,'&fname','&sname',&coursecode,'&street','&city',&pincode,&phone,'&enquiry','&en')

new 1: insert into Enquiry_ur14cs290 values (110002, 'Sachin', 'Nimje', 20, 'Gandhi nagar', 'ERD', 641142, 9234567890, '25-Oct-14', 'N')

1 row created.

SQL> insert into Enrollment_ur14cs290 values (&rno,&eno,&batchcode,'&edate');

Enter value for rno: 20002001

Enter value for eno: 110001

Enter value for batchcode: 101

Enter value for edate: 01-Jul-13

old 1: insert into Enrollment_ur14cs290 values (&rno,&eno,&batchcode,'&edate')

new 1: insert into Enrollment_ur14cs290 values (20002001,110001,101,'01-Jul-13')

1 row created.

SQL>/

Enter value for rno: 20002002

Enter value for eno: 110002

Enter value for batchcode: 102

Enter value for edate: 25-Oct-13

old 1: insert into Enrollment_ur14cs290 values (&rno,&eno,&batchcode,'&edate')

new 1: insert into Enrollment_ur14cs290 values (20002002,110002,102,'25-Oct-13')

1 row created.

SQL > /

Enter value for rno: 20002003

Enter value for eno: 110021

Enter value for batchcode: 103

Enter value for edate: 11-Jan-14

old 1: insert into Enrollment_ur14cs290 values (&rno,&eno,&batchcode,'&edate')

new 1: insert into Enrollment_ur14cs290 values (20002003,110021,103,'11-Jan-14')

1 row created.

SQL>/

Enter value for rno: 20002004

Enter value for eno: 110022

Enter value for batchcode: 104

Enter value for edate: 29-Jan-14

old 1: insert into Enrollment_ur14cs290 values (&rno,&eno,&batchcode,'&edate')

new 1: insert into Enrollment_ur14cs290 values (20002004,110022,104,'29-Jan-14')

1 row created.

SQL > /

Enter value for rno: 20002005

Enter value for eno: 110023

Enter value for batchcode: 110 Enter value for edate: 01-Mar-14 old 1: insert into Enrollment_ur14cs290 values (&rno,&eno,&batchcode,'&edate') new 1: insert into Enrollment_ur14cs290 values (20002005,110023,110,'01-Mar-14') 1 row created. SQL> insert into Feespaid_ur14cs290 values (&rollno, '&feespaiddate', '&chequeno', '&bankname', &amount); Enter value for rollno: 20002001 Enter value for feespaiddate: 01-Jul-133 Enter value for chequeno: 123456 Enter value for bankname: HDFC Enter value for amount: 5000 old 1: insert into Feespaid_ur14cs290 values (&rollno,'&feespaiddate','&chequeno','&bankname',&amount) new 1: insert into Feespaid_ur14cs290 values (20002001,'01-Jul-133','123456','HDFC',5000) 1 row created. SQL > /Enter value for rollno: 20002002 Enter value for feespaiddate: 25-Oct-13 Enter value for chequeno: -

Enter value for bankname: -

Enter value for amount: 4000

old 1: insert into Feespaid_ur14cs290 values

(&rollno,'&feespaiddate','&chequeno','&bankname',&amount)

new 1: insert into Feespaid_ur14cs290 values (20002002,'25-Oct-13','-','-',4000)

1 row created.

SQL > /

Enter value for rollno: 20002003

Enter value for feespaiddate: 11-Jan-14

Enter value for chequeno: 876544

Enter value for bankname: TMB

Enter value for amount: 3000

old 1: insert into Feespaid_ur14cs290 values

(&rollno,'&feespaiddate','&chequeno','&bankname',&amount)

new 1: insert into Feespaid_ur14cs290 values (20002003,'11-Jan-14','876544','TMB',3000)

1 row created.

SQL > /

Enter value for rollno: 20002004

Enter value for feespaiddate: 29-Jan-14

Enter value for chequeno: 765433

Enter value for bankname: DBI

Enter value for amount: 4000

old 1: insert into Feespaid_ur14cs290 values (&rollno,'&feespaiddate','&chequeno','&bankname',&amount) new 1: insert into Feespaid_ur14cs290 values (20002004,'29-Jan-14','765433','DBI',4000) 1 row created. SQL > /Enter value for rollno: 20002005 Enter value for feespaiddate: 01-Mar-14 Enter value for chequeno: -Enter value for bankname: -Enter value for amount: 5000 old 1: insert into Feespaid_ur14cs290 values (&rollno,'&feespaiddate','&chequeno','&bankname',&amount) new 1: insert into Feespaid_ur14cs290 values (20002005,'01-Mar-14','-','-',5000) 1 row created. SQL> insert into Course_ur14cs290 values (&coursecode, '&coursename', '&syllabus'); Enter value for coursecode: 10 Enter value for coursename: Oracle Enter value for syllabus: Sql, plsql, jdbc,jsp old 1: insert into Course_ur14cs290 values (&coursecode, '&coursename', '&syllabus') new 1: insert into Course_ur14cs290 values (10,'Oracle','Sql, plsql, jdbc,jsp')

1 row created. SQL > /Enter value for coursecode: 20 Enter value for coursename: Java Enter value for syllabus: Core java, servelets, jsp, ejb old 1: insert into Course_ur14cs290 values (&coursecode,'&coursename','&syllabus') new 1: insert into Course_ur14cs290 values (20,'Java','Core java,servelets,jsp,ejb') 1 row created. SQL> select * from Course_ur14cs290; COURSECODE COURSENAME SYLLABUS 10 Oracle Sql, plsql, jdbc,jsp 20 Java Core java, servelets, jsp, ejb SQL> select * from Batch_ur14cs290; BATCHCODE COURSECODE STARTINGD DURATION COURSEFEES .- ----- ------ ------101 5000 20 01-JAN-14 30 102 10 20-JAN-14 20 4000

4000

20

103

10 01-APR-14

104 4000 10 25-OCT-14 20

SQL> select * from Enquiry_ur14cs290;

ENQUIRYNO FNAME COURSECODE STREET SNAME

PINCODE PHONE ENQUIRYDA E CITY

110001 Anil Sharma 10 Ramnagar Cbe

641114 9486453331 20-JAN-14 Y

110002 Sachin 20 Gandhi nagar **ERD** Nimje

641142 9234567890 25-OCT-14 N

SQL> select * from Enrollment_ur14cs290;

ROLLNO ENQUIRYNO BATCHCODE ENROLLMEN

20002001 110001 101 01-JUL-13 20002002 110002 102 25-OCT-13 20002003 110021 103 11-JAN-14 20002004 110022 104 29-JAN-14

20002005 110023 110 01-MAR-14

SQL> select * from Feespaid_ur14cs290;

ROLLNO FEESPAIDD CHEQUENO BANKNAME

AMOUNT

20002001 01-JUL-33 123456 HDFC 5000 4000 20002002 25-OCT-13 - -20002003 11-JAN-14 876544 TMB 3000 20002004 29-JAN-14 765433 DBI 4000 5000 20002005 01-MAR-14 - -SQL> commit; Commit complete. SQL> spool off; **EXPERIMENT 2:** SQL> desc Course_ur14cs290; Null? Type Name COURSECODE NOT NULL NUMBER(2) **COURSENAME** VARCHAR2(30) **SYLLABUS** VARCHAR2(60) SQL> desc Batch_ur14cs290; Name Null? Type BATCHCODE NOT NULL NUMBER(3)

COURSECODE NOT NULL NUMBER(2)

STARTINGDATE NOT NULL DATE

DURATION NOT NULL NUMBER(3)s

COURSEFEES NOT NULL NUMBER(10,2)

SQL> desc Enquiry_ur14cs290;

Name Null? Type

ENQUIRYNO NOT NULL NUMBER(8)

FNAME VARCHAR2(30)

SNAME VARCHAR2(30)

COURSECODE NUMBER(2)

STREET VARCHAR2(30)

CITY VARCHAR2(30)

PINCODE NUMBER(6)

PHONE NUMBER(10)

ENQUIRYDATE NOT NULL DATE

EN_ST CHAR(1)

SQL> desc Enrollment_ur14cs290;

Name Null? Type

ROLLNO NOT NULL NUMBER(8)

ENQUIRYNO NOT NULL NUMBER(8)

BATCHCODE NUMBER(5)

ENROLLMENTDATE		NOT NULL DATE		
SQL> desc Feespaid_ur14	lcs290;			
Name	Null? T	Type		
ROLLNO	NOT 1	NULL NUMBER(8)		
FEESPAIDDATE	N	OT NULL DATE		
CHEQUENO		VARCHAR2(10)		
BANKNAME		VARCHAR2(30)		
AMOUNT		NUMBER(10,2)		
SQL> alter table Enrollme Table altered.	ent_ur14cs290	O add constraint p1 prima	ry key(enquiryno);	
SQL> truncate table Enro	llment_ur14cs	s290;		
Table truncated.				
SQL> alter table Enquiry_ur14cs290 add constraint f1 foreign key (enquiryno) references Enrollment_ur14cs290 (enquiryno);				
Table altered.				
SQL> alter table Course_u	ur14cs290 add	d constraint p2 primary ke	ey(coursecode);	

Table altered.		
SQL> truncate table Batch_u	ur14cs290;	
Table truncated.		
SQL> alter table Batch_ur14	4cs290 modify batchcode varchar(20);	
Table altered.		
SQL> alter table Enrollment	t_ur14cs290 add constraint unr1 unique (rollno);	
Table altered.		
SQL> alter table Enquiry_ur	r14cs290 drop column en_st;	
Table altered.		
SQL> desc Enquiry_ur14cs2	290;	
Name	Null? Type	
ENQUIRYNO	NOT NULL NUMBER(8)	
FNAME	VARCHAR2(30)	
SNAME	VARCHAR2(30)	

COURSECODE NUMBER(2)

STREET VARCHAR2(30)

CITY VARCHAR2(30)

PINCODE NUMBER(6)

PHONE NUMBER(10)

ENQUIRYDATE NOT NULL DATE

SQL> desc Batch_ur14cs290;

Name Null? Type

BATCHCODE NOT NULL VARCHAR2(20)

COURSECODE NOT NULL NUMBER(2)

STARTINGDATE NOT NULL DATE

DURATION NOT NULL NUMBER(3)

COURSEFEES NOT NULL NUMBER(10,2)

SQL> desc Course ur14cs290;

Name Null? Type

COURSECODE NOT NULL NUMBER(2)

COURSENAME VARCHAR2(30)

SYLLABUS VARCHAR2(60)

SQL> alter table Enquiry_ur14cs290 add en_st varchar2(20);

Table altered.
SQL> CREATE TABLE Enrollment_new(rollno number(8) constraint co9 not null, enquiryno number(8), batchcode number(5), enrollmentdate date constraint as2 not null);
Table created.
SQL> insert into enrollment_new select * from enrollment_ur14cs290;
0 rows created.
SQL> alter table Enrollment_ur14cs290 drop constraint unr1;
Table altered.
SQL> select * from Enquiry_ur14cs290 where enquirydate = sysdate;
no rows selected
SQL> create user floura identified by mypass;
User created.
SQL> grant insert,delete,update on Enrollment_ur14cs290 to floura;

Grant succeeded.					
SQL> revoke all on Enrollment_ur14cs290 from floura;					
Revoke succeeded.					
SQL> savepoint s1;					
Savepoint created.					
SQL> alter table Enrollment_ur14cs290 rename column enrollmentdate to endate;					
Table altered.					
SQL> desc Enrollment_ur14	cs290;				
Name	Null? Type				
ROLLNO	NOT NULL NUMBER(8)				
ENQUIRYNO	NOT NULL NUMBER(8)				
BATCHCODE NUMBER(5)					
ENDATE	NOT NULL DATE				
SQL> delete from Enquiry_ur14cs290 where enquirydate = sysdate;					
O rows doloted					

SQL> delete from Enquiry_ur14cs290 where enquirydate = current_date;
0 rows deleted.
SQL> commit;
Commit complete.
SQL> rollback;
Rollback complete.
SOL> spool off;

EXPERIMENT 3:

Link: https://www.youtube.com/watch?v=L4g9UJWT63c

DESCRIPTION:

GROUP FUNCTIONS:

Group function work on a group of data to obtain aggregated values.

SELECT AVG(column_name) FROM table_name

SELECT COUNT(column_name) FROM table_name;

SELECT MIN(column_name) FROM table_name;

SELECT MAX(column_name) FROM table_name;

SELECT SUM(column_name) FROM table_name;

GROUP BY CLAUSE

This allows us to use simultaneous column name and group functions.

HAVING CLAUSE

This is used to specify conditions on rows retrieved by using group by clause.

CODE:

SQL> select avg(netincome) from Batch ur14cs290 group by coursecode;

AVG(NETINCOME)

9000

8000

SQL> select coursename, avg(netincome) "maximum net income" from course_ur14cs290 group by coursecode having avg(netincome)>=all(select avg(netincome) from course_ur14cs290 group by coursecode);

COURSENAME	MAXII	MUM NET INCOME
java	9000	
SQL> select amount "total feespaid"	from fe	espaid_ur14cs290 where rollno=20002001;
total feespaid		
5000 SQL> select c.coursename, b.course batch_ur14cs290 b where c.courseco		
COURSENAME	COUR	SECODE NETINCOME
oracle	10	8000
oracle	10	8000
oracle	10	8000
java	20	9000
SQL> select count(enquiryno) from coursecode;	enquiry ₋	_ur14cs290 where coursecode=10 order by
COUNT(ENQUIRYNO)		

1

SQL> select fname from enquiry_ur14cs290 where fname like 's%';
FNAME
sachin
SQL> select to_char(netincome, '99,999,99') "NET INCOME" from batch_ur14cs290;
(NET INCOME)
90,00
80,00
80,00
80,00
SQL> select initcap(fname) from enquiry_ur14cs290;
INITCAP(FNAME)
A:1
Anil
Sachin

SQL> select netincome*7 "WEEKLY INCOME" , netincome*30 "MONTHLY INCOME" from batch_ur14cs290;

WEEK		MONTHLY INCOME
	63000	270000
	56000	240000
	56000	240000
	56000	240000
SQL> s	select ('\$' amou	unt) "AMOUNT" from feespaid_ur14cs290;
AMOU	UNT	
\$5000		
\$4000		
\$3000		
\$4000		
\$5000		
	select courseco by coursecode;	de, max(count(coursecode)) "Maximum Enquiry" from enquiry_ur14cs290
COUR	SECODE	MAXIMUM ENQUIRY

10	1
20	1
SQL> select (fname	' ' sname) "NAME" from enquiry_ur14cs290 order by fname desc;
NAME	
sachin nimje	
anil sharma	
-	nt(coursecode)) from course_ur14cs290 group by coursecode having select coursecode from course_ur14cs290 group by coursecode);
AVG(COUNT(COU	RSECODE))
SQL> select min(cou	rsefee) "MINIMUM PRICE", coursecode from course_ur14cs290 group
MINIMUM PRICE	COURSECODE
4000	10
SQL> commit;	
Commit complete.	
SQL> spool off;	

EXPERIMENT 4:

Link: https://www.youtube.com/watch?v=QR5P2aSk1Yg&feature=youtu.be

DESCRIPTION:

Natural join matches tuples with the same values for all common attributes, and retains only one copy of each common column

Danger in natural join: beware of unrelated attributes with same name which get equated incorrectly

Set operations union, intersect, and except

Each of the above operations automatically eliminates duplicates

To retain all duplicates use the corresponding multiset versions union all, intersect all and except all.

Suppose a tuple occurs m times in r and n times in s, then, it occurs:

- 1 m + n times in r union all s
- 1 $\min(m,n)$ times in rintersect all s
- 1 $\max(0, m-n)$ times in **rexcept all** s

CODE:

YOUTUBE LINK:

https://youtu.be/QR5P2aSk1Yg

SQL> select fname, sname from Enquiry_ur14cs290_second where city='CBE' union select sname, fname from Enquiry_ur14cs290_second where city='erd';

FNAME	SNAME	
anil	sharma	
nimje	sachin	
SQL> select * frodec-14';	om Enquiry_ur14cs2	90_second where enquirydate between '01-jan-14' and '0
ENQUIRYNO F		SNAME
COURSECODE	STREET	CITY
	PHONE ENQUIRYI	DA EMAILEN_ST
110001 anil	sharm	a
10 ramnagar	cbe	
641114 948645	53331 20-JAN-14	
110002 sachin	nimj	e
20 gandhi na	ngar erd	
641142 923456	67890 25-OCT-14	
ENQUIRYNO F	NAME	SNAME

COURSECODE	STREET	CITY		
PINCODE	PHONE ENQUIRY			
	name,c.coursename, 90 c where c.courser		quiry_ur14cs290_secon and e.city='CBE';	nd e natural join
FNAME	COURSEN		CITY	
anil	oracle	cbe		
SQL> select coucount(coursecod		ıEnquiry_ur1	4cs290_second group b	y coursecode having
no rows selected	I			
_	name,e.sname,e.city ode=e.coursecode ar		ur14cs290 c,Enquiry_ur ne<>'java';	14cs290_second e
FNAME	SNAME			
anil	sharma			

SQL> select coursecode from course_ur14cs290 group by coursecode having count(coursecode)=0;				
no rows selected				
SQL> Select dist	inct fname,sname,cit	ty,enquiryno from Enquiry_ur14cs290_second;		
FNAME	SNAME			
CITY	ENQUIRYNO			
anil	sharma			
cbe	110001			
sachin	nimje			
erd	110002			
SQL> Select fna	me,sname,city,enqui	ryno from Enquiry_ur14cs290_second;		
FNAME	SNAME			
CITY	ENQUIRYNO)		
anil	sharma			
cbe	110001			

sachin nimje

erd 110002

SQL> select coursecode from Enquiry_ur14cs290_second group by coursecode having count(coursecode)> avg(coursecode);

no rows selected

SQL> select e.rollno,i.enquiryno,e.enrollmentdate,f.feespaiddate,f.chequeno,f.bankname from enrollment_ur14cs290 e,Enquiry_ur14cs290_second i, feespaid_ur14cs290 f where e.rollno<>0 and f.amount<>0 and e.rollno=f.rollno;

ROLLNO ENQUIRYNO ENROLLMEN FEESPAIDD CHEQUENO BANKNAME

20002001	110001 01-JUL-13 01-JUL-13 123456	hdfc	
20002002	110002 25-OCT-13 25-OCT-13		
20002003	110021 11-JAN-14 11-JAN-14 876544	tmb	
20002004	110022 29-JAN-14 29-JAN-14 765433	dbi	
20002005	110023 01-MAR-13 01-MAR-14		

EXPERIMENT 5:				
Link: https://www.youtube.com	m/watch?	v=LX85vEh9JGw	<u>&feature=youtu.t</u>	<u>oe</u>
DESCRIPTION:				
CODE:				
SQL> select fname from Enqueenrollment_ur14cs290);	iry_ur14cs	s290_second wher	e enquiryno in (so	elect enquiryno from
FNAME				
Anil				
Sachin				
SQL> select * from Enquiry_u dec-14';	r14cs290_	_second where enq	uirydate between	ı '01-jan-14' and '01-
ENQUIRYNO FNAME		SNAME		
COURSECODE STREET		CITY	-	
PINCODE PHONE ENQ	UIRYDA	E	-	
110001 Anil	Sharma			
10 Ramnagar	CBE			
641114 9486453331 20-JAN	N-14 Y			

20 Gandhi Nagar	Gandhi Nagarerd	
641142 9234567890 25-NOV	′-14 N	
ENQUIRYNO FNAME	SNAME	
COURSECODE STREET	CITY	-
PINCODE PHONE ENQU		
SQL> select fname from Enquir from course_ur14cs290 where o	<u>*</u>	here coursecode = (select coursecode
FNAME		
Anil		
SQL> insert into Enquiry_ur14c (&eno,'&fname','&sname',&cou		,&pincode,☎,'&enquiry','&en');
Enter value for eno: 110003		
Enter value for fname: Floura		
Enter value for sname: Angel		
Enter value for coursecode: 10		

Nimje

110002 Sachin

Enter value for street: Malad

Enter value for city: Bombay

Enter value for pincode: 640097

Enter value for phone: 1001001003

Enter value for enquiry: 07-Nov-14

Enter value for en: Y

old 1: insert into Enquiry ur14cs290 second values (&eno, '&fname', '&sname', &coursecode, '&street', '&city', &pincode, &phone, '&enquiry', '&en')

new 1: insert into Enquiry_ur14cs290_second values (110003, 'Floura', 'Angel', 10, 'Malad', 'Bombay', 640097, 1001001003, '07-Nov-14', 'Y')

1 row created.

SQL>/

Enter value for eno: 110004

Enter value for fname: Raja

Enter value for sname: haji

Enter value for coursecode: 20

Enter value for street: Borivali

Enter value for city: Bombay

Enter value for pincode: 640097

Enter value for phone: 2001003004

Enter value for enquiry: 14-Dec-14

Enter value for en: N

old 1: insert into Enquiry_ur14cs290_second values (&eno, '&fname', '&sname', &coursecode, '&street', '&city', &pincode, &phone, '&enquiry', '&en')

new 1: insert into Enquiry_ur (110004, 'Raja', 'haji', 20, 'Boriva		3004,'14-Dec-14','N')
1 row created.		
SQL> select fname from Enqu from course_ur14cs290 where		re coursecode = (select coursecode
FNAME		
Sachin		
Raja		
SQL> select * from Enquiry_u	ur14cs290_second;	
ENQUIRYNO FNAME	SNAME	
COURSECODE STREET	CITY	
PINCODE PHONE ENQ	UIRYDA E	-
110001 Anil	Sharma	
10 Ramnagar	CBE	

641114 9486453331 20-JAN-14 Y

Nimje 110002 Sachin 20 Gandhi Nagar Gandhi Nagarerd 641142 9234567890 25-NOV-14 N ENQUIRYNO FNAME SNAME COURSECODE STREET CITY PINCODE PHONE ENQUIRYDA E 110003 Floura Angel 10 Malad Bombay 640097 1001001003 07-NOV-14 Y 110004 Raja haji 20 Borivali Bombay SNAME ENQUIRYNO FNAME COURSECODE STREET PINCODE PHONE ENQUIRYDA E 640097 2001003004 14-DEC-14 N

SQL> select fname from Enquiry_ur14cs290_second where city='Bombay' and coursecode= (select coursecode from course_ur14cs290 where coursename='Oracle');
FNAME
Floura
SQL> select fname from Enquiry_ur14cs290_second en1 where exists (select en2.city from Enquiry_ur14cs290_second en2 where en2.fname='Raja'and en1.city=en2.city);
FNAME
Raja
Floura
SQL> select fname from Enquiry_ur14cs290_second where exists (select coursecode from Enquiry_ur14cs290_second where coursecode =10 and coursecode =20);
no rows selected
SQL> select coursename from course_ur14cs290 where exists (select coursecode from Enquiry_ur14cs290_second where coursecode =10 and coursecode =20);
no rows selected

SQL> select fname from Enquiry_ur14cs290_second where city='CBE' and coursecode = (select coursecode from batch_ur14cs290 where batchcode=101);
no rows selected
SQL> select fname from Enquiry_ur14cs290_second where city='Bombay' and coursecode = (select coursecode from batch_ur14cs290 where batchcode=101);
FNAME
Raja
SQL> spool off;

\mathbf{F}	X	ΡĮ	\mathbf{R}	IN	AE.	NT	6.

Link: https://www.youtube.com/watch?v=cqXyqJt6VnA&feature=youtu.be

DESCRIPTION:

A view provides a mechanism to hide certain data from the view of certain users.

Any relation that is not of the conceptual model but is made visible to a user as a "virtual relation" is called a **view**.

A view is defined using the **create view** statement which has the form

create view v as <query expression >

where<query expression> is any legal SQL expression. The view name is represented by v.

CODE:

SQL> create view view1 as select coursecode as id_no,coursename as cname,netincome from course_ur14cs290;

View created.

SQL> select * from view1;

ID_NO CNAME	NETINCOME
10 oracle	8000
20 java	9000

cname,netincome fro	om course_ur14cs290 or	ler by coursename;
View created.		
SQL> select * from	view1;	
ID_NO CNAME		NCOME
20 java	9000	
10 oracle	8000	
		me,b.coursefees,b.startingdate,b.batchcode from e c.coursecode=b.coursecode;
View created.		
SQL> select * from	view2;	
COURSENAME	COURSEFEE	S STARTINGD BATCHCODE
java	5000 01-JAN-16	101

SQL> create or replace view view1 as select coursecode as id_no,coursename as

oracle	4000 20-JAN-14	102
oracle	4000 01-APR-14	103
oracle	4000 25-OCT-14	104
SQL> create view view3 with check option;	as select coursecode	from course_ur14cs290 where coursename='Java'
View created.		
SQL> select * from view	v3;	
COURSECODE		
20		
SQL> spool off;		

EXPERIMENT 7:

LINK: https://www.youtube.com/watch?v=DbiLtB2ztao

DESCRIPTION:

TRIGGER

- ➤ A trigger is a block of statements, which are fired automatically when a DML operation takes place.
- ➤ These are always associated with the database tables.

Triggers are classified as two types:

- 1. Row Level Triggers.
- 2. Statement Level Triggers.

Syntax of a Trigger

CODE:

for each row

SQL> create or replace trigger reregister 2 before insert on enquiry_ur14cs290 3 for each row declare code enquiry_ur14cs290.coursecode%type; 6 begin select coursecode into code from enquiry_ur14cs290 where coursecode=10; if(code=10) then raise_application_error(-20110, 'already registered'); 11 end if; 12 end; 13 / SQL> insert into enquiry_ur14cs290 values(110004,'floura','angel',10,'karunya','cbe',641114,1001001001,'25-oct-16','y'); insert into enquiry_ur14cs328 values(110004,'floura','angel',10,'karunya','cbe',641114,1001001001,'25-oct-16','y'); * ORA-20110: already registered SQL> create or replace trigger deletet before delete on enquiry_ur14cs290

declare begin 6 if deleting then 7 delete from enrollment_ur14cs290 8 where enrollment_ur14cs290.enquiryno = :old.enquiryno; dbms_output.put_line('row is deleted with enquiryno: '||:old.enquiryno); 10 end if; 11 end; 12 / Trigger created. SQL> select * from Enrollment_ur14cs290; ROLLNO ENQUIRYNO BATCHCODE ENROLLMEN 20002001 110001 101 01-JUL-13 20002002 102 25-OCT-13 110002 20002003 110021 103 11-JAN-14

SQL> delete from enquiry_ur14cs290 where enquiryno = 110001;

104 29-JAN-14

110 01-MAR-14

row is deleted with enquiryno: 110001

110022

110023

20002004

20002005

SQL> select * from Enrollment_ur14cs290;

ROLLNO ENQUIRYNO BATCHCODE ENROLLMEN

20002002	110002	102 25-OCT-13
20002003	110021	103 11-JAN-14
20002004	110022	104 29-JAN-14
20002005	110023	110 01-MAR-14

SQL> create or replace trigger updatet

- 2 before update on batch_ur14cs290
- 3 for each row
- 4 declare
- 5 begin
- 6 if updating then
- 7 dbms_output.put_line('you can update the fees at the last day of the current year only: ||:new.coursefees);
- 8 end if;
- 9 end;

10 /

Trigger created.

SQL> select * from batch_ur14cs290;

BATCHCODE NETINCOME	COURSECOD	DE STA	RTINGD	DURATION COURSEFEES
101	20 01-JAN-14	30	5000	
102	10 20-JAN-14	20	4000	
103	10 01-APR-14	20	4000	
104	10 25-OCT-14	20	4000	

SQL> update batch_ur14cs290 set coursefees=6000 where coursecode=20; you can update the fees at the last day of the current year only: 6000

1 row updated.

SQL> select * from batch_ur14cs290;

BATCHCODE COURSECODE S' NETINCOME	TARTINGD DURATION COURSEFEES
101 20 01-JAN-14 30	0 6000
102 10 20-JAN-14 20	0 4000
103 10 01-APR-14 20	0 4000
104 10 25-OCT-14 2	0 4000

SQL> declare

2 count number(9);

3	cursor cur is select avg(coursefees) from batch_ur14cs290 group by coursecode;
4	begin
5	open cur;
6	fetch cur into count;
7	dbms_output_line('average is: ' count);
8	close cur;
9	end;
10	
db	oms_output.put_line('average is: ' count);
	*
ERI	ROR at line 7:
OR	A-06550: line 7, column 41:
PLS	3-00204: function or pseudo-column 'COUNT' may be used inside a SQL statement
only	7
OR	A-06550: line 7, column 4:
PL/S	SQL: Statement ignored
SQI	_> declare
2	counttot number(9);
3	cursor cur is select avg(coursefees) from batch_ur14cs290 group by coursecode;
4	begin
5	open cur;
6	fetch cur into counttot;
7	dbms_output_nut_line('average is: ' counttot):

8	close cur;
9	end;
10	
aver	rage is: 4500
PL/S	SQL procedure successfully completed.
SQI	L> DECLARE
2	bcode enrollment_ur14cs290.batchcode%type;
3	CURSOR c2 is
4	SELECT batchcode into bcode from enrollment_ur14cs290 where rollno=20002004;
5	BEGIN
6	OPEN c2;
7	
8	LOOP
9 batc	update batch_ur14cs290 set coursefees=coursefees-(0.2*coursefees) where hcode=bcode;
10	FETCH c2 into bcode;
11	EXIT WHEN c2% notfound;
12	dbms_output_line('table is modified ' bcode);
13	END LOOP;
14	CLOSE c2;
15	END;
16	

table is modified 101

table is modified 102

table is modified 103

PL/SQL procedure successfully completed.

SQL> select * from batch_ur14cs290;

BATCHCODE	COURSECODE STARTINGD	DURATION COURSEFEES
NETINCOME		

4800

20 01-JAN-14 30

102	10 20-JAN-14	20	4000
103	10 01-APR-14	20	4000
104	10 25-OCT-14	20	3200

SQL> spool off;

101

EXPERIMENT 8:

LINK: https://www.youtube.com/watch?v=cnw7-kJroeI

DESCRIPTION:

Syntax of a function (ORACLE).

Syntax of a Stored Procedure (ORACLE)

CODE:

SQL> create or replace procedure f1(cid in number)

- 2 is
- 3 name enquiry_ur14cs290.fname%type;
- 4 begin
- 5 select fname into name from enquiry_ur14cs290 where coursecode=cid;
- 6 dbms_output.put_line('name is '||name);
- 7 end;
- 8 /

Procedure created.

SQL> declare

- 2 begin
- 3 f1(11001);

4	end;
5	
nan	ne is anil
PL	SQL procedure successfully completed.
SQ	L> create or replace procedure f2(dt in date, eno in number)
2	is
3	num batch_ur14cs290.duration%type;
4	edate batch_ur14cs290.startingdate%type;
5	begin
6	select duration into num from batch_ur14cs290 where coursecode=eno;
7	select startingdate into edate from batch_ur14cs290 where coursecode=eno;
8	dbms_output_line('duration is ' num);
9	dbms_output_line('starting date is ' edate);
10	end;
11	
Pro	ocedure created.
SQ	L> declare
2	begin
3	f2('01-jul-13',20);
4	end;

5 / duration is 30 starting date is 01-JAN-14 PL/SQL procedure successfully completed. SQL> create or replace procedure f3(rol in number) 2 is 3 begin 4 delete from enrollment_ur14cs290 where rollno=rol; exception when 7 NO_DATA_FOUND then raise_application_error(-20100,'the given data is not present'); 8 end; 9 / Procedure created. SQL> create or replace function f4(fee in number) return number is 3 fees number(8); begin select b.coursefees into fees from batch_ur14cs290 b ,course_ur14cs290 c where b.coursecode=fee and rownum=1;

6 return fees;	
7 end;	
8 /	
Function created.	
SQL> declare	
2 numb number(8);	
3 begin	
4 numb:=f4(10);	
5 dbms_output.put_line('fees of the coursecode 10 is ' numb);	
6 end;	
7 /	
PL/SQL procedure successfully completed.	
SQL> declare	
2 numb number(8);	
3 begin	
4 numb:=f4(10);	
5 dbms_output_line('fees of the coursecode 10 is ' numb);	
6 end;	
7 /	
fees of the coursecode 10 is 4000	

SQL> create or replace function f5
2 return number is
3 num number(2);
4 begin
5 select count(c.coursecode) into num from course_ur14cs290 c ,feespaid_ur14cs290 f having f.amount=5000;
6 return num;
7 end;
8 /
Function created.
SQL> declare
2 numb number(2);
3 begin
4 numb:=f5();
5 dbms_output.put_line('number of course whose amount is 5000 is ' numb);
6 end;
7 /
number of course whose amount is 5000 is 1
SQL> create or replace function f6(roll in number)
2 return varchar2 is
3 nf enquiry_ur14cs290.fname%type;
4 begin

5 select e.fname into nf from enquiry_ur14cs290 e, enrollment_ur14cs290 e1 where e1.enquiryno=roll and rownum=1;
6 return nf;
7 end;
8 /
Function created.
SQL> declare
2 nm varchar2(20);
3 begin
4 nm:=f6(110001);
5 dbms_output.put_line('fname is ' nm);
6 end;
7 /
fname is anil
PL/SQL procedure successfully completed.
SQL> spool off;

EXPERIMENT-9: JDBC LINK: https://www.youtube.com/watch?v=iSZBv_hAFTM AIM: To set up a connection between java and databasae **DESCRIPTION:** PROCEDURE: STEP 1: create a project in netbeans ide 8.0.2 STEP 2: go to libraries and add the jar file/folder STEP 3: go to services->database->right click on jdbc connectivity-> click connect and connect the project with the database STEP 4: type the required code and give the appropriate username and password CODE: package jdbc; import java.sql.Connection; import java.sql.DriverManager; import java.sql.ResultSet; import java.sql.SQLException; import java.sql.Statement; import java.util.Scanner;

* @author Floura

*/

```
public class Main {
  /**
  * @param args the command line arguments
  */
  public static void main(String[] args) {
    // TODO code application logic here
    {
    ResultSet r;
    try
{
Class.forName("oracle.jdbc.driver.OracleDriver");
Connection c=DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:XE","system","floura");
Statement st=c.createStatement();
r=st.executeQuery("select * from course_ur14cs290");
Scanner s=new Scanner (System.in);
while(true){
System.out.println("Enter your choice");
 System.out.println("1.INSERT");
 System.out.println("2.UPDATE");
 System.out.println("3.DELETE");
 int ch=s.nextInt();
 switch(ch){
   case 1: System.out.println("Enter codeno");
```

```
int code= s.nextInt();
System.out.println("Enter coursename");
String name= s.next();
System.out.println("Enter syllabus");
String syl= s.next();
// System.out.println("Enter amount");
//int amt= s.nextInt();
String query="insert into course_ur14cs290 "+"values (" +code+",""+name+"',""+syl+"')";
st.executeUpdate(query);
     System.out.println("Value Inserted");
break;
   case 2:
     System.out.println("Enter the coursename you need to update");
     String cn=s.next();
      System.out.println("Enter the courscode where you need to update");
      int cc=s.nextInt();
      String query1="update course_ur14cs290"+" set coursename ="+""+cn+""+"where coursecode
="+cc;
     st.executeUpdate(query1);
      System.out.println("Table Updated");
      break;
   case 3:
     System.out.println("Enter the coursecode you want to delete");
     int dc=s.nextInt();
```

```
String query2="delete from course_ur14cs290 where coursecode ="+dc;
     st.executeUpdate(query2);
     System.out.println("Record Deleted");
     break;
   default:
     System.out.println("Wrong Choice");
}
while(r.next())
System.out.println(r.getInt(1)+"\t"+r.getString(2));
}
catch(SQLException e)
System.out.println("SQL error:"+e);
}
catch(Exception e)
System.out.println("Error:"+e);
}
}
 }
```

}

OUPUT:

RESULT: The connection has been successfully set up

EXPERIMENT: 10 LINK: https://youtu.be/tS3bEJI7Qlg **Aim**: Make an application in Android Application(Karunya Map) **Code: <u>Database Handler</u>** package com.example.allie.map; import android.content.ContentValues; import android.content.Context; import android.database.Cursor; import android.database.SQLException; import android.database.sqlite.SQLiteDatabase; import android.database.sqlite.SQLiteOpenHelper; import android.widget.Toast; import static com.example.allie.map.R.id.sno; /** * Created by floura and Priya on 29/10/16. */ public class DatabaseHandler extends SQLiteOpenHelper { //columns public static final String DATABASE_NAME ="Details"; public static final String AUTO_ID = "AUTO_ID"; public static final String TABLE_NAME = "KarunyaMap";

public static final String ID = "Surveyno";

public static final String NAME = "Block";

```
public static final String PERSON_INCHARGE = "Person_name";
public static final String INFO = "complete_info";
Context mcontext;
public DatabaseHandler(Context context) {
super(context, DATABASE_NAME, null, 1);
this.mcontext = context;
@Override
public void onCreate(SQLiteDatabase db) {
db.execSQL("create table " + TABLE_NAME
+"(" + ID + " text , " + AUTO_ID + " integer primary key autoincrement, " + NAME + " text, "
+ PERSON_INCHARGE+ " text, "
+ INFO + " text); " );
}
@Override
public void onUpgrade(SQLiteDatabase db, int oldVersion, int newVersion) {
db.execSQL("DROP TABLE IF EXIST"+TABLE_NAME);
onCreate(db);
public long INSERT_DATA(String sno, String block, String pi, String details)
```

```
SQLiteDatabase db = this.getWritableDatabase();
ContentValues contentValues = new ContentValues();
contentValues.put(NAME,block);
contentValues.put(ID, sno);
contentValues.put(PERSON_INCHARGE,pi);
contentValues.put(INFO, details);
return db.insert(TABLE_NAME,null,contentValues);
public Boolean UPDATE_DATA(String sno, String block, String pi, String details)
SQLiteDatabase db = this.getWritableDatabase();
ContentValues contentValues = new ContentValues();
contentValues.put(NAME,block);
contentValues.put(ID, sno);
contentValues.put(PERSON_INCHARGE,pi);
contentValues.put(INFO, details);
return db.update(TABLE_NAME,contentValues,ID+"="+sno,null) > 0;
}
public boolean DELETE_DATA(String sno)
SQLiteDatabase db = this.getWritableDatabase();
return db.delete(TABLE_NAME, ID + "=" + sno, null)>0;
```

```
public Cursor GET_ALL_DATA()
SQLiteDatabase db = this.getWritableDatabase();
return db.rawQuery("select" +ID+" As _id ,* from "+TABLE_NAME,null);
public Cursor GET(String row_id)throws SQLException
SQLiteDatabase db = this.getWritableDatabase();
Cursor cursor = db.query(true, TABLE_NAME, new String[]{ID,
NAME, PERSON_INCHARGE, INFO
}, row_id + "=" + ID, null, null, null, null, null, null);
if(cursor!=null)
cursor.moveToNext();
return cursor;
public boolean check_value(String sno){
SQLiteDatabase db = this.getWritableDatabase();
String Query = "Select * from " + TABLE_NAME + " where " + ID + " = "" + sno+""";
Cursor cursor = db.rawQuery(Query, null);
if(cursor.getCount() <= 0){</pre>
cursor.close();
```

```
return false;
return true;
Main Activity 2
package com.example.allie.map;
import android.app.AlertDialog;
import android.content.Intent;
import android.database.Cursor;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;
public class Main2Activity extends AppCompatActivity {
  EditText editText;
  Button button, button2;
  DatabaseHandler handler;
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
     setContentView(R.layout.activity_main2);
```

```
handler = new DatabaseHandler(this);
    editText = (EditText)findViewById(R.id.snum);
    button = (Button)findViewById(R.id.abt);
    button2 = (Button)findViewById(R.id.vbt);
    registerbutton();
  }
  private void registerbutton()
    button.setOnClickListener(new View.OnClickListener() {
       @Override
       public void onClick(View v) {
         String sno = editText.getText().toString();
         if (sno.length()==0)
            editText.setError("Required!!!");
            Toast.makeText(getApplicationContext(), "Survey Number
Required", Toast. LENGTH_SHORT). show();
         }
         else {
            if (handler.check_value(sno)) {
              Intent intent = new Intent(getApplicationContext(), View2.class);
              intent.putExtra(handler.ID, sno);
              startActivity(intent);
```

Toast.makeText(getApplicationContext(),"Details already exists. Edit details",Toast.LENGTH_SHORT).show();

```
} else {
              Intent intent = new Intent(getApplicationContext(), Add.class);
              intent.putExtra(handler.ID, sno);
              startActivity(intent);
     });
     button2.setOnClickListener(new View.OnClickListener() {
       @Override
       public void onClick(View v) {
         String sno = editText.getText().toString();
         if (sno.length()==0)
            editText.setError("Required!!!");
            Toast.makeText(getApplicationContext(), "Survey Number
Required", Toast. LENGTH_SHORT). show();
          }
         else {
            if(handler.check_value(sno)) {
              Intent intent = new Intent(getApplicationContext(), View2.class);
```

```
intent.putExtra(handler.ID, sno);
              startActivity(intent);
            }
            else{
              Intent intent = new Intent(getApplicationContext(), Add.class);
              intent.putExtra(handler.ID, sno);
              startActivity(intent);
              Toast.makeText(getApplicationContext(),"No Details, Add new
Details",Toast.LENGTH_SHORT).show();
     });
  public void show(String title,String message)
    AlertDialog.Builder builder = new AlertDialog.Builder(this);
    builder.setCancelable(true);
    builder.setTitle(title);
    builder.setMessage(message);
    builder.show();
  }
```

NewActivity

package com.example.allie.map;

import android.app.AlertDialog;
import android.app.Dialog;
import android.app.TimePickerDialog;
import android.content.DialogInterface;
import android.database.Cursor;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.view.ViewGroup;
import android.widget.AdapterView;
import android.widget.ArrayAdapter;
import android.widget.Button;
import android.widget.EditText;
import android.widget.RadioButton;
import android.widget.RadioGroup;
import android.widget.Spinner;
import android.widget.TimePicker;
import android.widget.Toast;
import java.text.SimpleDateFormat;
import java.util.Calendar;
public class NewActivity extends AppCompatActivity {
EditText ID.PI.INFO:

```
Button Update, Delete, Add, View D, see;
Spinner Blocks;
DatabaseHandler handler;
private long ROW_ID;
final String cont[] = {
"Aerodynamics Lab-I",
"Angel Garden",
"Angelina Block",
"Animal House",
"Bank Building CUM Economical GH",
"Bethany(BR) Hostel",
"Bethesda",
"BRR Hostel",
"Carmel Staff Quarters",
"CCD",
"Civil Engineering Dept",
"Computer Centre",
"CST Block",
"Dhakshanamoorthy Block",
"DoVE Building",
"Ebenezer Auditorium",
"ECE",
"Edward George Block",
"Elohim Auditorium",
"Emmanuel Auditorium",
```

```
"Evangeline/OPHRA",
"Father Duraisamy Hostel",
"Generator cum Power Room",
"Hepzibah Block",
"JMR Hostel",
"JVR Hostel",
"Kidron Staff Quarters",
"KIS School Building",
"Kitchen & Dining Block",
"MBA Block",
"Mechanical Engineering",
"New Electrical Sciences",
"New Science & Humanities",
"Old Electrical Sciences",
"Old Science & Humanities",
"P R Garg Residence",
"Post Office",
"Senior Bachelor's Quarters",
"Servant Quarters (Guest House)",
"Sevugapandian Block",
"Sewage Treatment Plant",
"Sewage Treatment Plant",
"Seesha",
"Stores",
"Students Amenity Centre",
```

```
"Sundararaj Hostel",
"Vistors Lounge in South Block",
};
int contr;
@Override
protected void onCreate(Bundle savedInstanceState) {
super.onCreate(savedInstanceState);
setContentView(R.layout.activity_new);
PI = (EditText)findViewById(R.id.pi);
INFO= (EditText)findViewById(R.id.details);
ID = (EditText)findViewById(R.id.sno);
Update = (Button)findViewById(R.id.update);
Delete = (Button)findViewById(R.id.delete);
Add = (Button)findViewById(R.id.add);
ViewD = (Button)findViewById(R.id.viewdetails);
Blocks =(Spinner)findViewById(R.id.spinner2);
see = (Button)findViewById(R.id.see);
handler = new DatabaseHandler(this);
if (savedInstanceState != null) ROW_ID =
savedInstanceState.getLong(DatabaseHandler.AUTO_ID);
else ROW_ID = 0;
SET_SPINNER();
REGISTER_BUTTON_LISTENER();
}
```

```
private void SET_SPINNER()
ArrayAdapter<String> arrayAdapter = (new
ArrayAdapter<String>(getApplicationContext(),R.layout.spinnerview,cont){
@Override
public View getView(int position, View convertView, ViewGroup parent) {
return super.getView(position, convertView, parent);
}
});
Blocks.setAdapter(arrayAdapter);
Blocks.setOnItemSelectedListener(new AdapterView.OnItemSelectedListener() {
@Override
public void on Item Selected (Adapter View <?> parent, View view, int position, long id) {
contr = position;
}
@Override
public void onNothingSelected(AdapterView<?> parent) {
}
});
protected void onResume() {
```

```
super.onResume();
SET_ROW_ID_FROM_INTENT();
}
private void SET_ROW_ID_FROM_INTENT()
if(ROW_ID == 0)
Bundle bundle = getIntent().getExtras();
if (bundle != null) ROW_ID = bundle.getLong(handler.ID);
else ROW_ID = 0;
private void REGISTER_BUTTON_LISTENER()
ViewD.setOnClickListener(new View.OnClickListener(){
@Override
public void onClick(View v) {
Toast.makeText(getApplicationContext(), "Button Clicked", Toast.LENGTH_SHORT).show();
GET_INFO();
}
});
Update.setOnClickListener(new View.OnClickListener() {
@Override
```

```
public void onClick(View v) {
Toast.makeText(getApplicationContext(), "Button Clicked", Toast.LENGTH_SHORT).show();
UPDATE_DETAILS();
});
Delete.setOnClickListener(new View.OnClickListener() {
@Override
public void onClick(View v) {
DELETE_STATE();
}
});
Add.setOnClickListener(new View.OnClickListener() {
@Override
public void onClick(View v) {
SAVE_STATE();
}
});
//to confirm if data is being added or not
see.setOnClickListener(new View.OnClickListener() {
@Override
public void onClick(View v) {
Cursor cursor = handler.GET_ALL_DATA();
```

```
StringBuffer buffer = new StringBuffer();
while(cursor.moveToNext())
buffer.append(cursor.getString(0)+"\n");
buffer.append(cursor.getString(3)+"\n'");
show("Data",buffer.toString());
});
}
public void show(String title,String message)
AlertDialog.Builder builder = new AlertDialog.Builder(this);
builder.setCancelable(true);
builder.setTitle(title);
builder.setMessage(message);
builder.show();
}
private void GET_INFO(){
int flag = 1;
final String survey = ID.getText().toString();
if (survey.length()==0)
```

```
ID.setError("Required!!!");
Toast.makeText(getApplicationContext(),"Survey Number
Required", Toast. LENGTH_SHORT). show();
flag=0;
if(flag!=0) {
if (ROW_ID == 0) {
handler.GET(survey);
private void UPDATE_DETAILS(){
AlertDialog.Builder builder = new AlertDialog.Builder(this);
builder.setMessage("Are you sure you want to update?")
.setCancelable(false)
.setPositiveButton("Yes", new DialogInterface.OnClickListener() {
public void onClick(DialogInterface dialog, int id) {
String pname = PI.getText().toString();
String sno= ID.getText().toString();
String details = INFO.getText().toString();
String blocks = cont[contr];
handler.UPDATE_DATA(sno,blocks,pname,details);
})
```

```
.setNegativeButton("No", new DialogInterface.OnClickListener() {
public void onClick(DialogInterface dialog, int id) {
dialog.cancel();
});
AlertDialog alert = builder.create();
alert.show();
finish();
Toast.makeText(getApplicationContext(), "Details Updated", Toast.LENGTH_SHORT).show();
}
private void DELETE_STATE(){
AlertDialog.Builder builder = new AlertDialog.Builder(this);
builder.setMessage("Are you sure you want to delete?")
.setCancelable(false)
.setPositiveButton("Yes", new DialogInterface.OnClickListener() {
public void onClick(DialogInterface dialog, int id) {
String sno= ID.getText().toString();
handler.DELETE_DATA(sno);
}
})
.setNegativeButton("No", new DialogInterface.OnClickListener() {
public void onClick(DialogInterface dialog, int id) {
dialog.cancel();
```

```
});
AlertDialog alert = builder.create();
alert.show();
finish();
Toast.makeText(getApplicationContext(), "Details Deleted", Toast.LENGTH_SHORT).show();
private void SAVE_STATE()
{
int flag = 1;
String pname = PI.getText().toString();
if(pname.length()==0)
{
PI.setError("Required!!!");
Toast.makeText(getApplicationContext(),"Person Incharge
Required", Toast.LENGTH_SHORT).show();
flag=0;
String sno= ID.getText().toString();
if (sno.length()==0)
ID.setError("Required!!!");
```

```
Toast.makeText(getApplicationContext(),"Survey Number
Required",Toast.LENGTH_SHORT).show();
flag=0;
}
String details = INFO.getText().toString();
if(details.length()==0)
INFO.setError("Required!!!");
Toast.makeText(getApplicationContext(),"Details Required",Toast.LENGTH_SHORT).show();
flag=0;
}
String blocks = cont[contr];
if(flag!=0)
if (ROW_ID == 0) {
long id = handler.INSERT_DATA(sno,blocks,pname,details);
if (id > 0) {
ROW_ID = id;
}
finish();
Toast.makeText(getApplicationContext(), "Details Added", Toast.LENGTH_SHORT).show();
}
```

```
@Override
protected void onStop() {
// if(reminderManager!=null)
// reminderManager.doUnbindService();
super.onStop();
@Override
public void onSaveInstanceState(Bundle outState) {
super.onSaveInstanceState(outState);
outState.putLong(DatabaseHandler.ID,ROW_ID);
MAPSACTIVITY
package com.example.allie.map;
import android.app.AlertDialog;
import android.content.Context;
import android.*;
import android.content.DialogInterface;
import android.content.Intent;
import android.database.Cursor;
import android.graphics.Color;
import android.location.*;
import android.location.LocationListener;
import android.location.LocationManager;
```

import android.support.v4.app.FragmentActivity;						
import android.os.Bundle;						
import android.view.View;						
import android.widget.EditText;						
import android.widget.*;						
import android.widget.Spinner;						
import com.google.android.gms.maps.CameraUpdateFactory;						
import com.google.android.gms.maps.GoogleMap;						
import com.google.android.gms.maps.MapView;						
import com.google.android.gms.maps.SupportMapFragment;						
import com.google.android.gms.maps.UiSettings;						
$import\ com.google. and roid.gms. maps. model. Bitmap Descriptor Factory;$						
import com.google.android.gms.maps.model.LatLng;						
import com.google.android.gms.maps.model.MarkerOptions;						
import com.google.android.gms.maps.model.PolylineOptions;						
import android.widget.AdapterView.OnItemSelectedListener;						
import java.io.IOException;						
import java.util.List;						
public class MapsActivity extends FragmentActivity implements OnItemSelectedListener{						
DatabaseHandler handler;						
private GoogleMap mMap; // Might be null if Google Play services APK is not available.						
//MapView map = (MapView) findViewById(R.id.map);						

```
String pla[]={
"Aerodynamics Lab-I",
"Angel Garden",
"Angelina Block",
"Animal House",
"Bank Building CUM Economical GH",
"Bethany(BR) Hostel",
"Bethesda",
"BRR Hostel",
"Carmel Staff Quarters",
"CCD",
"Civil Engineering Dept",
"Computer Centre",
"CST Block",
"Dhakshanamoorthy Block",
"DoVE Building",
"Ebenezer Auditorium",
"ECE",
"Edward George Block",
"Elohim Auditorium",
"Emmanuel Auditorium",
"Evangeline/OPHRA",
"Father Duraisamy Hostel",
"Generator cum Power Room",
"Hepzibah Block",
```

```
"JMR Hostel",
"JVR Hostel",
"Kidron Staff Quarters",
"KIS School Building",
"Kitchen & Dining Block",
"MBA Block",
"Mechanical Engineering",
"New Electrical Sciences",
"New Science & Humanities",
"Old Electrical Sciences",
"Old Science & Humanities",
"P R Garg Residence",
"Post Office",
"Senior Bachelor's Quarters",
"Servant Quarters (Guest House)",
"Sevugapandian Block",
"Sewage Treatment Plant",
"Sewage Treatment Plant",
"Seesha",
"Stores",
"Students Amenity Centre",
"Sundararaj Hostel",
"Vistors Lounge in South Block",
};
double lat[]=\{10.93254,
```

10.94294,	
10.93965,	
10.93571,	
10.93955,	
10.94314,	
10.93579,	
10.94004,	
10.93604,	
10.93714,	
10.93537,	
10.93520,	
10.93361,	
10.93785,	
10.93531,	
10.93439,	
10.93635,	
10.93960,	
10.93475,	
10.93397,	
10.93505,	
10.94029,	
10.93670,	
10.93916,	
10.94066,	
10.94123,	

```
10.93553,
10.93902,
10.94219,
10.93454,
10.93471,
10.93621,
10.93632,
10.93604,
10.93439,
10.93812,
10.93976,
10.93804,
10.94019,
10.93738,
10.93823,
10.94394,
10.93859,
10.93441,
10.93729,
10.93647,
10.93699,
};
double lon[]={76.74508,
76.75306,
76.74328,
```

76.74277,		
76.74589,		
76.74558,		
76.74473,		
76.74505,		
76.74003,		
76.74403,		
76.74405,		
76.74326,		
76.74305,		
76.74006,		
76.74267,		
76.74370,		
76.74296,		
76.74114,		
76.74313,		
76.74493,		
76.73867,		
76.74129,		
76.74076,		
76.74333,		
76.74505,		
76.74511,		
76.73993,		
76.75448,		

```
76.74532,
76.74305,
76.74403,
76.74176,
76.74114,
76.74410,
76.74484,
76.73942,
76.74587,
76.74106,
76.74610,
76.73974,
76.73943,
76.74649,
76.74174,
76.74532,
76.74015,
76.73957,
76.74042,
};
String dis[]={"PT/2009/MRP/2009-10 dt 04.12.2009",
"PT/2001 dt 27.01.2001",
"PT/2010/MRP/2010-11 dt 06.01.2011",
"PT/2001 dt 12.01.2001",
```

```
"PT/2007/MRP/2006-07 dt 29.01.2007",
"-",
"PT/2007/MRP/2006-07 dt 29.01.2007",
"PT/1998 /dt 08.01.1998",
"-",
"PT/3475/87 A5/ dt 29.04.1987",
"PT/2002 dt 23.04.2002",
"PT/2002/ dt 24.02.2002",
"PT/2002/ dt 05.01.2002",
"PT/2007MRP/2006-07 dt 29.01.2007",
"PT/1987/ dt 13.08.1997",
"-",
"PT/1997 dt 15.06.1997",
"PT/2002 dt 23.04.2002",
"PT/2000 dt 21.07.2000",
"PT/2007/MRP/2006-2007 dt 29.01.2007",
"PT/1997 /dt 25.06.1997",
"PT/1997 dt 12.09.1997",
"PT/2000 dt 16.01.2000",
"PT/2007/MRP/2006-07 dt 29.01.2007",
"PT/2007/MRP/2006-07 dt 29.01.2007",
"PT/1997 dt 15.10.1997",
"PT/2002 /dt 23.04.2002",
"PT/2007/MRP/2006-07 dt 29.01.2007",
"PT/2002 dt 23.04.2002",
```

```
"PT/1987/ dt 13.08.1997",
"PT/2007/MRP/2006-07 dt 29.01.2007",
"PT/2007/MRP/2006-07 dt 29.01.2007",
"PT/5063/96 A3 dt 07.01.1997",
"PT/1997 dt 13.08.1997",
"PT/2007/MRP/2006-07 dt 29.01.2007",
"PT/2001/dt 12.01.2001",
"PT/2001/10.05.01 dt 10.05.2001",
"PT/2001 dt 21.03.2002",
"PT/2001/dt 16.07.2001",
"PT/2007/MRP/2006-2007 dt 29.01.2007",
"PT/2007/MRP/2006-07 dt 29.01.2007",
"-",
"PT/2011/MRP/2011-12 dt 19.08.2011",
"PT/2012/MRP/2012-13 dt 30.10.2012",
"PT/2001/dt 12.04.2001",
"PT/2001 dt 10.11.2001",
};
LatLng latLng;
String loc, item;
private UiSettings mUiSettings;
@Override
protected void onCreate(Bundle savedInstanceState) {
super.onCreate(savedInstanceState);
```

```
setContentView(R.layout.activity_maps);
//
      Button addbtns = (Button) findViewById(R.id.addbtns);
//
      addbtns.setOnClickListener(new View.OnClickListener(){
//
        @Override
        public void onClick(View v) {
//
//
          Intent i = new Intent(MapsActivity.this,ku_db.class);
//
          startActivity(i);
//
        }
//
      });
setUpMapIfNeeded();
Spinner spinner = (Spinner) findViewById(R.id.spinner);
spinner.setOnItemSelectedListener(this);
ArrayAdapter<String> dataAdapter = new ArrayAdapter<String>(this,
android.R.layout.simple_spinner_item, pla);
int str1=pla.length;
int str2=dis.length;
mMap.move Camera (Camera Update Factory.new Lat Lng Zoom (
new LatLng(10.93604, 76.74410), 16));
mMap.addPolyline(new PolylineOptions().geodesic(true)
.add(new LatLng(10.93794, 76.74040))
.add(new LatLng(10.93819, 76.73894))
.add(new LatLng(10.93614, 76.73815))
```

```
.add(new LatLng(10.93447, 76.73825))
.add(new LatLng(10.93437, 76.73927))
.add(new LatLng(10.93526, 76.73951))
.add(new LatLng(10.93534, 76.74001))
.add(new LatLng(10.93604, 76.74021))
.add(new LatLng(10.93794, 76.74040)).width(3).color(Color.CYAN));
mMap.addPolyline(new PolylineOptions().geodesic(true)
.add(new LatLng(10.93814, 76.74136))
.add(new LatLng(10.93831, 76.74184))
.add(new LatLng(10.93715, 76.74168))
.add(new LatLng(10.93698, 76.74251))
.add(new LatLng(10.93768, 76.74265))
.add(new LatLng(10.93758, 76.74398))
.add(new LatLng(10.93856, 76.74418))
.add(new LatLng(10.93899, 76.74572))
.add(new LatLng(10.93812, 76.74571))
.add(new LatLng(10.93526, 76.74549))
.add(new LatLng(10.93524, 76.74581))
.add(new LatLng(10.93151, 76.74536))
.add(new LatLng(10.93117, 76.74325))
.add(new LatLng(10.93116, 76.74186))
.add(new LatLng(10.93395, 76.74204))
.add(new LatLng(10.93416, 76.74137))
.add(new LatLng(10.93581, 76.74166))
```

```
.add(new LatLng(10.93623, 76.74047))
.add(new LatLng(10.93814, 76.74136)).width(3).color(Color.YELLOW));
mMap.addPolyline(new PolylineOptions().geodesic(true)
.add(new LatLng(10.93857, 76.73874))
.add(new LatLng(10.94013, 76.73916))
.add(new LatLng(10.94013, 76.74017))
.add(new LatLng(10.94105, 76.74041))
.add(new LatLng(10.94114, 76.74205))
.add(new LatLng(10.94065, 76.74423))
.add(new LatLng(10.93869, 76.74405))
.add(new LatLng(10.93849, 76.74230))
.add(new LatLng(10.93827, 76.74104))
.add(new LatLng(10.93857, 76.73874)).width(3).color(Color.RED));
mMap.addPolyline(new PolylineOptions().geodesic(true)
.add(new LatLng(10.93857, 76.73874))
.add(new LatLng(10.94013, 76.73916))
.add(new LatLng(10.94013, 76.74017))
.add(new LatLng(10.94105, 76.74041))
.add(new LatLng(10.94114, 76.74205))
.add(new LatLng(10.94065, 76.74423))
.add(new LatLng(10.93869, 76.74405))
.add(new LatLng(10.93849, 76.74230))
.add(new LatLng(10.93827, 76.74104))
```

```
.add(new LatLng(10.93857, 76.73874)).width(3).color(Color.RED));
mMap.addPolyline(new PolylineOptions().geodesic(true)
.add(new LatLng(10.93953, 76.74421))
.add(new LatLng(10.93917, 76.74572))
.add(new LatLng(10.94011, 76.74902))
.add(new LatLng(10.94414, 76.74812))
.add(new LatLng(10.94349, 76.74499))
.add(new LatLng(10.94196, 76.74440))
.add(new LatLng(10.93953, 76.74421)).width(3).color(Color.MAGENTA));
spinner.setAdapter(dataAdapter);
mMap.addPolyline(new PolylineOptions().geodesic(true)
.add(new LatLng(10.94150, 76.75225))
.add(new LatLng(10.94495, 76.75204))
.add(new LatLng(10.94466, 76.75400))
.add(new LatLng(10.94221, 76.75378))
.add(new LatLng(10.94150, 76.75225)).width(3).color(Color.GREEN));
spinner.setAdapter(dataAdapter);
mMap.addPolyline(new PolylineOptions().geodesic(true)
.add(new LatLng(10.94083, 76.75097))
.add(new LatLng(10.94188, 76.75335))
.add(new LatLng(10.94137, 76.75346))
.add(new LatLng(10.94140, 76.75390))
```

```
.add(new LatLng(10.94208, 76.75398))
.add(new LatLng(10.94268, 76.75559))
.add(new LatLng(10.93830, 76.75615))
.add(new LatLng(10.93840, 76.75385))
.add(new LatLng(10.93931, 76.75114))
.add(new LatLng(10.94083, 76.75097)).width(3).color(Color.DKGRAY));
spinner.setAdapter(dataAdapter);
}
@Override
protected void onResume() {
super.onResume();
setUpMapIfNeeded();
// Toast.makeText(this,"Hello welcome back",Toast.LENGTH_SHORT);
@Override
public void onItemSelected(AdapterView<?> parent, View view, int position, long id) {
item = parent.getItemAtPosition(position).toString();
Toast.makeText(parent.getContext(), "Selected: " + item, Toast.LENGTH_LONG).show();
public void onadd(View v){
```

```
Intent i = new Intent(MapsActivity.this,Main2Activity.class);
startActivity(i);
public void onsrch(View view)
String loc=item;
int ad=0;
int tat=0;
Boolean flag=false;
for(int i=0;i<pla.length;i++)
if(flag==false)
if (loc.equals(pla[i]))
//ad=i;
tat=i;
flag=true;
break;
} else
flag=false;
```

```
}
if(flag==true)
LatLng latLng = new LatLng(lat[tat], lon[tat]);
String detail;
detail = dis[tat];
//
       detail = dis[tat];a
//mMap.addMarker(new MarkerOptions().position(latLng).title(loc).snippet("Population:
4,627,300").icon(BitmapDescriptorFactory.fromResource(R.drawable.cst)));
mMap.addMarker(new MarkerOptions().position(latLng).title(loc).snippet(detail));
mMap.animateCamera(CameraUpdateFactory.newLatLng(latLng));
}
else
Context context = getApplicationContext();
CharSequence text = "Location Not Found!";
int duration = Toast.LENGTH_SHORT;
Toast toast = Toast.makeText(context, text, duration);
toast.show();
/*List<Address> addlist=null;
EditText ed=(EditText)findViewById(R.id.txtl);
String loc=ed.getText().toString();
if(loc!=null || !loc.equals(""))
```

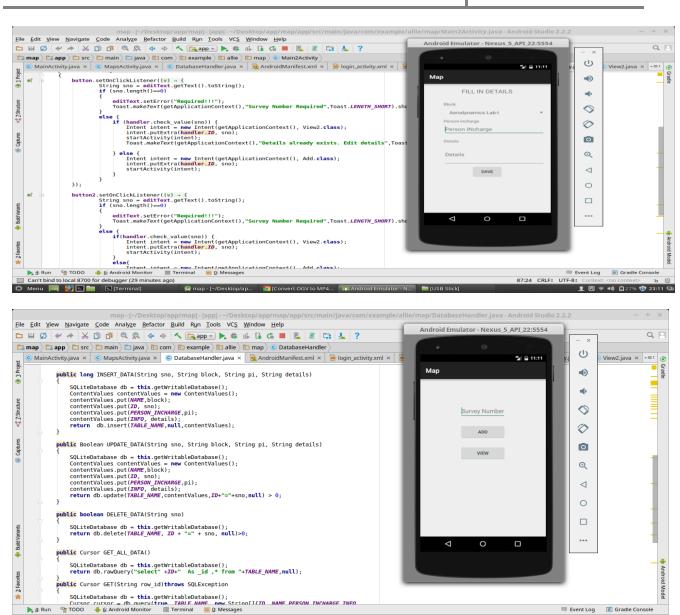
```
Geocoder gc=new Geocoder(this);
try {
addlist=gc.getFromLocationName(loc,1);
} catch (IOException e) {
e.printStackTrace();
Address add=addlist.get(0);
LatLng latLng=new LatLng(add.getLatitude(),add.getLongitude());
mMap.addMarker(new MarkerOptions().position(latLng).title("Marker"));
mMap.animateCamera(CameraUpdateFactory.newLatLng(latLng));*/
}
public void Ctype(View view)
if(mMap.getMapType()==GoogleMap.MAP_TYPE_NORMAL)
mMap.setMapType(GoogleMap.MAP_TYPE_SATELLITE);
}
else
mMap.setMapType(GoogleMap.MAP\_TYPE\_NORMAL);
}
```

```
private void setUpMapIfNeeded() {
// Do a null check to confirm that we have not already instantiated the map.
if (mMap == null) {
// Try to obtain the map from the SupportMapFragment.
mMap = ((SupportMapFragment) \ getSupportFragmentManager().findFragmentById(R.id.map))
.getMap();
// Check if we were successful in obtaining the map.
if (mMap != null) {
setUpMap();
}
@Override
public void onBackPressed() {
AlertDialog.Builder builder = new AlertDialog.Builder(this);
builder.setMessage("Are you sure you want to logout?")
.setCancelable(false)
.setPositiveButton("Yes", new DialogInterface.OnClickListener() {
public void onClick(DialogInterface dialog, int id) {
MapsActivity.this.finish();
}
})
.setNegativeButton("No", new DialogInterface.OnClickListener() {
public void onClick(DialogInterface dialog, int id) {
```

```
dialog.cancel();
}
});
AlertDialog alert = builder.create();
alert.show();
private void setUpMap() {
//mMap.addMarker(new MarkerOptions().position(new LatLng(10.93784,
76.74487)).title("Bethesda"));
//mMap.addMarker(new MarkerOptions().position(new LatLng(10.93581,
76.74383)).title("Karunya University"));
mMap.setMyLocationEnabled(true);\\
mMap.getUiSettings().setZoomControlsEnabled(true);
}
@Override
public void onNothingSelected(AdapterView<?> parent) {
}
```

OUTPUT

```
<u>F</u>ile <u>E</u>dit <u>V</u>iew <u>N</u>avigate <u>C</u>ode Analyze <u>R</u>efactor <u>B</u>uild <u>Run <u>T</u>ools VC<u>S</u> <u>W</u>indow <u>H</u>elp</u>
                                                                                                            Android Emulator - Nexus 5 API 22:5554
Q 🖪
மு
                                                                                                                                                             View2.java × -≡1
   열a 월 11:11
                                                                                                             Map
                                                                                                                                                       •
               button.setOnClickListener((v) → {
    String sno = editText.getText().toString();
    if (sno.length()==0)
                                                                                                                         DETAILS
                          editText.setError("Required!!!");
Toast.makeText(getApplicationContext(),"Survey Number Required",Toast.LENGTH_SHORT).sh
                                                                                                                                                      0
                       startActivity(intent);
Toast.makeText(getApplicationContext(),"Details already exists. Edit details",Toast
                                                                                                                                                      0
                         } else {
   Intent intent = new Intent(getApplicationContext(), Add.class);
   intent.putExtra(handler_ID, sno);
   startActivity(intent);
                                                                                                                                                      Q
                                                                                                                      d \quad f \quad g \quad h \quad j \quad k
               editText.setError("Required!!!");
Toast.makeText(getApplicationContext(),"Survey Number Required",Toast.LENGTH_SHORT).sho
                          a {
   iffhandler.check_value(sno)) {
    Intent intent = new Intent(getApplicationContext(), View2.class);
   intent.purtExtra(handler.ID, sno);
   startActivity(intent);
}
   Event Log Gradle Console
 Can't bind to local 8700 for debugger (29 minutes ago)
                                                                                                                                     87:24 CRLF: UTF-8:
Menu 🔚 🐉 🔄 📄 🕒 [Terminal]
```



Registration of the properties of the propertie

Can't bind to local 8700 for debugger (28 minutes ago)

Menu 🥅 🎳 🔚 🗈 [Terminal]

20:49 LF¢ UTF-8¢

