

Ex.No:01

## DDL COMMANDS

### Aim:

To create and work with DDL commands

### Procedure:

Step1: Open Run SQL on Command line and connect to SQL .

Step 2: Then work with database using SQL queries

### 1.CREATE:

**Syntax:** CREATE TABLE tablename(column\_name1 datatype,...,column\_name\_n datatype);

### Code:

Create table programming(serial number(10), Name varchar2(100),joining date,shift number(1));

### OUTPUT:

```
SQL> create table programming (Serial number (10), Name varchar2(100), Language varchar2(100), Joining date, Shift number (1));
Table created.

SQL> desc programming;
Name                                     Null?      Type
-----
SERIAL                                  NUMBER(10)
NAME                                    VARCHAR2(100)
LANGUAGE                               VARCHAR2(100)
JOINING                                DATE
SHIFT                                  NUMBER(1)
```

### 2.Alter:

#### i) Alter table- Add Column:

**Syntax:** ALTER TABLE tablename ADD column\_name datatype;

**Code:** alter table programming add language\_type varchar2(15);

#### ii) Alter table-Drop Column:

**Syntax:** ALTER TABLE tablename DROP column\_name;

**Code:** alter table programming drop language\_type;

#### iii) Alter table-Rename Column:

**Syntax:** ALTER TABLE table\_name RENAME COLUMN oldname TO newname;

**Code:** alter table programming rename column joining to date\_of\_joining;

#### iv) Alter table-Modify Datatype:

**Syntax:** ALTER TABLE table\_name MODIFY column\_name datatype;

**Code:** alter table programming serial varchar2(10);

#### OUTPUT:

```
SQL> desc programming;
Name                                     Null?      Type
-----
SERIAL                                 VARCHAR2(10)
NAME                                  VARCHAR2(100)
LANGUAGE                              VARCHAR2(100)
DATE_OF_JOINING                       DATE
SHIFT                                 NUMBER(1)
```

SQL> alter table programming add language\_type varchar2(15);

Table altered.

```
SQL> desc programming;
Name                                     Null?      Type
-----
SERIAL                                 VARCHAR2(10)
NAME                                  VARCHAR2(100)
LANGUAGE                              VARCHAR2(100)
DATE_OF_JOINING                       DATE
SHIFT                                 NUMBER(1)
LANGUAGE_TYPE                          VARCHAR2(15)
```

```
SQL> desc programming;
Name                                     Null?      Type
-----
SERIAL                                 NUMBER(10)
NAME                                  VARCHAR2(100)
LANGUAGE                              VARCHAR2(100)
JOINING                              DATE
SHIFT                                 NUMBER(1)
```

SQL> alter table programming add Language\_type varchar2(15);

Table altered.

SQL> alter table programming rename column joining to date\_of\_joining;

Table altered.

SQL> alter table programming drop column language\_type;

Table altered.

SQL> alter table programming modify Serial varchar2(10);

Table altered.

### 3.Rename:

**Syntax:** RENAME old\_name to new\_name;

**Code:** Rename programming to programming\_class;

#### OUTPUT:

```
SQL> desc programming;
  Name                               Null?    Type
  -----
SERIAL                               VARCHA2(10)
NAME                                 VARCHA2(100)
LANGUAGE                             VARCHA2(100)
DATE_OF_JOINING                       DATE
SHIFT                                 NUMBER(1)
LANGUAGE_TYPE                         VARCHA2(15)

SQL> rename programming to programming_class;

Table renamed.
```

### 4.Truncate

**Syntax:** TRUNCATE TABLE table\_name;

**Code:** truncate table programming\_class;

#### OUTPUT:

```
SQL> truncate table programming_class;

Table truncated.

SQL> select * from programming_class;

no rows selected
```

### 5.Drop

**Syntax:** DROP TABLE table\_name;

**Code:** drop table programming\_class;

#### OUTPUT:

```
SQL> drop table programming_class;

Table dropped.

SQL>
```

#### RESULT:

Thus the DDL Commands has been executed successfully

Ex No:02

## DML COMMANDS

### Aim:

To work with DML commands

### Procedure:

Step1: Open Run SQL on Command line and connect to SQL .

Step 2: Then work with database using SQL queries

### 1.INSERT:

**Syntax:** INSERT INTO table\_name(column\_name1,...,column\_name\_n) VALUES (value1, value2,...,valueN);

**Code:** insert into tution(rollno,name,standard,subjects,shift,fee) values(1,'Balan',12,'Maths',1,3500);

### OUTPUT:

```
SQL> insert into tution(rollno, name,standard,subjects,shift,fee) values(01,'Balan',12,'maths',1,3500);
1 row created.

SQL> desc tution;
Name                               Null?    Type
-----
ROLLNO                             NUMBER(15)
NAME                               VARCHAR2(25)
STANDARD                           NUMBER(2)
SUBJECTS                           VARCHAR2(45)
SHIFT                              NUMBER(2)
FEE                                NUMBER(5)

SQL> select * from tution;

  ROLLNO NAME                STANDARD
-----
1 Balan          12
maths
1
3500

SQL> |
```

### 2.SELECT:

**Syntax:** SELECT column\_name1, column\_name2,...,column\_name\_n FROM table\_name WHERE condition\_expression;

**Code:** select rollno,name,standard,subjects from tution where fee>4500;

## OUTPUT:

```
SQL> select Rollno,name,standard,subjects from tution where fee>4500;
```

	ROLLNO	NAME	STANDARD
SUBJECTS			
Maths	5	Vishwa	12
Maths	5	Vishwa	12

```
SQL> select Rollno,name,standard,subjects from tution where fee<4500;
```

	ROLLNO	NAME	STANDARD
maths	1	Balan	12
Science	3	Dheepan	12

```
SQL>
```

## 3.UPDATE:

**Syntax:** UPDATE table\_name SET column\_name1=value1, column\_name2=value,... WHERE condition;

**Code:** update tution set standard=12 where name= 'Niteesh';

## 4.DELETE:

**Syntax:** DELETE FROM table\_name WHERE condition;

**Code:** delete from tution where rollno=5;

## OUTPUT:

```
SQL> update tution set standard=12 where name='Nitheesh';
```

```
1 row updated.
```

```
SQL> delete from tution where rollno=5;
```

```
2 rows deleted.
```

```
SQL> select * from tutuion;
```

```
select * from tutuion
```

```
*
```

```
ERROR at line 1:
```

```
ORA-00942: table or view does not exist
```

```
SQL> select * from tution;
```

	ROLLNO	NAME	STANDARD	SHIFT	FEE
maths	1	Balan	12	1	3500
Science	1	Nitheesh	12	2	4500
Science	3	Dheepan	12	2	3800

	ROLLNO	NAME	STANDARD	SHIFT	FEE
Social	4	Aslam	12	2	4500

**Ex No:03**

## **DCL COMMANDS**

**Aim:**

To work with DCL commands

**Procedure:**

Step1: Open Run SQL on Command line and connect to SQL .

Step 2: Then work with database using SQL queries

**1.GRANT:**

**Syntax:** GRANT privileges ON object\_name TO user;

**Code:** grant all privileges on tution to baldb;

**2.REVOKE:**

**Syntax:** REVOKE privileges ON object\_name FROM user;

**Code:** revoke all privileges on tution from baldb;

**OUTPUT:**

```
SQL> create user baldb identified by balandb;
User created.

SQL> grant all privileges on tution to baldb;
Grant succeeded.

SQL> revoke all privileges on tution from baldb;
Revoke succeeded.

SQL> |
```

Ex No:04

## SUB QUERIES

**Aim:**

To work with Sub Queries

**Procedure:**

Step1: Open Run SQL on Command line and connect to SQL .

Step 2: Then work with database using SQL queries

### 1.SELECT :

**Syntax:** SELECT Column\_name FROM table\_name WHERE column\_name expression operator(SELECT column\_name FROM table\_name WHERE condition);

**Code:** select \* from tution where rollno in (select rollno from tution where shift=1);

**OUTPUT:**

```
SQL> select * from tution where rollno in (select rollno from tution where shift=1);
```

	ROLLNO	NAME	STANDARD		
SUBJECTS				SHIFT	FEE
maths	1	Balan	12	1	3500
maths	5	Raju	10	1	5200
science	6	vishwa	10	1	5300

```
SQL>
```

### 2.INSERT:

**Syntax:** INSERT INTO table1 SELECT \* FROM table2 WHERE condition;

**Code:** sql> create table tution3 as select \* from tution where rollno=1;

sql>insert into tution3 (rollno,name,standard,subjects,shift,fee) select \* from tution where rollno=2;

**OUTPUT:**

```
SQL> create table tution3 as select * from tution where rollno = 1;
Table created.
SQL> insert into tution3(rollno, name, standard, subjects, shift, fee) select * from tution where rollno = 2;
1 row created.
SQL> select * from tution3;
```

	ROLLNO	NAME	STANDARD		
SUBJECTS				SHIFT	FEE
maths	1	Balan	12	1	3500
Science	2	Nitheesh	12	2	4500

### 3.UPDATE:

**Syntax:** UPDATE table1 SET column\_name1=value WHERE column\_name in (SELECT column\_name FROM table2 WHERE condition);

**Code:** update tution3 set standard=10 where fee in (select fee from tution where fee=3500);

#### OUTPUT:

```
SQL> select * from tution;
```

	ROLLNO	NAME	STANDARD		SHIFT	FEE
	1	Balan	12			
maths					1	3500
	2	Nitheesh	12			
Science					2	4500
	3	Dheepan	12			
Science					2	3800

```
SQL> select * from tution3;
```

	ROLLNO	NAME	STANDARD		SHIFT	FEE
	4	Aslam	12			
Social					2	4500
	5	Raju	10			
maths					1	5200
	6	vishwa	10			
science					1	5300

6 rows selected.

```
SQL> select * from tution3;
```

	ROLLNO	NAME	STANDARD		SHIFT	FEE
	1	Balan	12			
maths					1	3500

```
SQL> update tution3 set standard = 10 where fee in ( select fee from tution where fee = 3500);
```

1 row updated.

```
SQL> select* from tution3;
```

	ROLLNO	NAME	STANDARD		SHIFT	FEE
	1	Balan	10			
maths					1	3500
	2	Nitheesh	12			
Science					2	4500

SQL>

### 4.DELETE:

**Syntax:** DELETE FROM table1 WHERE column\_name in (SELECT column\_name FROM table2 WHERE column\_name=value);

**Code:** delete from tution3 where shift in(select shift from tution3 where fee=4500)

#### OUTPUT:

```
SQL> delete from tution3 where shift in (select shift from tution3 where fee=4500);
```

1 row deleted.

```
SQL> select * from tution3;
```

	ROLLNO	NAME	STANDARD		SHIFT	FEE
	1	Balan	10			
maths					1	3500



**Ex.No:05**

## **JOINS**

**Aim:**

To create and work with MySQL Joins

**Procedure:**

Step1: Open Run SQL on Command line and connect to SQL .

Step 2: Then work with database using SQL queries

**1.Inner Join:**

**Syntax:** Select column\_name() from table1 innerjoin table2 on table1.column\_name=table2.column\_name;

**Code:**

Select tuition.name,school.dept,tuition.shift from school inner join tuition on school.regno=tuition.regno;

**OUTPUT:**

```
SQL> select * from school;

  REGNO DEPT   SCHOOL
-----
      1 commerce vhss
      2 biology petit
      3 computer petit
      4 computer patrick
      5 commerce vhss

SQL> select * from tuition;

  REGNO NAME      SHIFT  FEE A
-----
      1 Balan          1   3500 P
      2 Aslam          1   3500 P
      3 Vishwa         1   4000 A
      4 Raju           1   4000 P
      5 Tamizh         2   4000 A
      6 Sandro         2   3800 A

6 rows selected.

SQL> |
```

```
SQL> select tuition.name,school.dept,tuition.shift from school inner join tuition on school.regno=tuition.regno;

NAME      DEPT      SHIFT
-----
Balan     commerce  1
Aslam     biology   1
Vishwa    computer  1
Raju      computer  1
Tamizh    commerce  2
```

## 2.Left Join:

**Syntax:** Select column\_names from table1 left join table2 on  
table1.column\_name=table2.column\_name;

**Code:** select tuition.name, school.dept from school left join tuition on school.regno=tuition.regno;

### OUTPUT:

```
SQL> select tuition.name,school.dept from school left join tuition on school.regno=tuition.regno;
```

NAME	DEPT
Balan	commerce
Aslam	biology
Vishwa	computer
Raju	computer
Tamizh	commerce

## 3.Right Join:

**Syntax:** Select column\_names from table1 right join table2 on  
table1.column\_name=table2.column\_name;

**Code:** select tuition.name, school.dept from school left join tuition on school.regno=tuition.regno;

### OUTPUT:

```
SQL> select tuition.name,school.dept from school right join tuition on school.regno=tuition.regno;
```

NAME	DEPT
Balan	commerce
Aslam	biology
Vishwa	computer
Raju	computer
Tamizh	commerce
Sandro	

## 4.Full Outer Join:

**Syntax:** Select column\_names from table1 full outer join table2 on  
table1.column\_name=table2.column\_name;

**Code:** Select tuition.name, tuition.shift, school.school,school.dept from school full join tuition on  
school.regno=tuition.regno;

### OUTPUT:

```
SQL> select tuition.name,tuition.shift,school.school,school.dept from school full join tuition on school.regno=tuition.regno;
```

NAME	SHIFT	SCHOOL	DEPT
Balan	1	vhss	commerce
Aslam	1	petit	biology
Vishwa	1	petit	computer
Raju	1	patrick	computer
Tamizh	2	vhss	commerce
Sandro	2		

6 rows selected.

### RESULT:

Thus the Join queries has been executed successfully

**Ex No:06**

## **PL/SQL**

**Aim:**

To work with PL/SQL

**Procedure:**

Step1: Open Run SQL on Command line and connect to SQL .

Step 2: Then work with database using PL/SQL Block commands

- i. Declare
- ii. Begin
- iii. Exception
- iv. End

**SYNTAX:**

DECLARE

<declarations section>

BEGIN

<executable section commands>

EXCEPTION

<exception handling>

END;

**EXAMPLE:**

**1.Addition of Two Numbers:**

**Program Code:**

```
SQL> SET SERVEROUTPUT ON;
```

```
SQL> declare
```

```
2 x number(5);
```

```
3 y number(5);
```

```
4 z number(5);
```

```
5 begin
```

```
6 x:=50;
```

```
7 y:=20;
```

```
8 z:=x+y;
```

```
9 dbms_output.put_line('sum is' || z);
```

```
10 end;
```

```
11 /
```

## Output:

```
SQL> SET SERVEROUTPUT ON;
SQL> declare
  2  x number(5);
  3  y number(5);
  4  z number(5);
  5  begin
  6  x:=50;
  7  y:=20;
  8  z:=x+y;
  9  dbms_output.put_line('sum is'||z);
 10  end;
 11  /
sum is70

PL/SQL procedure successfully completed.

SQL>
```

## 2. Generating Series:

### Program Code:

```
SQL> SET SERVEROUTPUT ON;
SQL> declare
  2  n number(5);
  3  begin
  4  n:=1;
  5  for i in 1..10 loop
  6  case n
  7  when 1 then
  8  dbms_output.put_line(i);
  9  when 2 then
 10  if mod(i,2)=0 then
 11  dbms_output.put_line(i);
 12  end if;
 13  when 3 then
 14  if mod(i,2)!=0 then
 15  dbms_output.put_line(i);
 16  end if;
 17  end case;
 18  end loop;
 19  end;
 20  /
```

## OUTPUT:

```
SQL> SET SERVEROUTPUT ON;
SQL> declare
  2  n number(5);
  3  begin
  4  n:=1;
  5  for i in 1..10 loop
  6  case n
  7  when 1 then
  8  dbms_output.put_line(i);
  9  when 2 then
 10  if mod(i,2)=0 then
 11  dbms_output.put_line(i);
 12  end if;
 13  when 3 then
 14  if mod(i,2)!=0 then
 15  dbms_output.put_line(i);
 16  end if;
 17  end case;
 18  end loop;
 19  end;
 20  /
1
2
3
4
5
6
7
8
9
10

PL/SQL procedure successfully completed.

SQL>
```

## Ex no: 06

## CURSOR PROCEDURE FUNCTIONS

### AIM:

To write a SQL program to work with cursor, procedure and functions.

### PROCEDURE:

**Step 1:** Open Run SQL on Command line and connect to SQL

**Step 2:** Then work with database using SQL queries.

### PL/SQL PROCEDURE:

The PL/SQL stored procedure or simply a procedure is a PL/SQL block which performs one or more specific tasks. It is just like procedures in other programming languages.

The procedure contains a header and a body.

- **Header:** The header contains the name of the procedure and the parameters or variables passed to the procedure.
- **Body:** The body contains a declaration section, execution section and exception section similar to a general PL/SQL block.

### Syntax for creating procedure:

```
CREATE [OR REPLACE] PROCEDURE procedure_name
```

```
    [ (parameter [,parameter]) ]
```

```
IS
```

```
    [declaration_section]
```

```
BEGIN
```

```
    executable_section
```

```
[EXCEPTION
```

```
    exception_section]
```

```
END [procedure_name];
```

**TABLE QUERY:**

```
create table employee(emp_id number(5)primary key, emp_name varchar2(20), city  
varchar2(20), salary number(7), age number(5));
```

```
insert into employee values (1, 'Raju', 'Pdy', 800000, 20);
```

```
insert into employee values (2, 'Niteesh', 'Pdy', 790000, 21);
```

```
insert into employee values (3, 'Punith', 'AP', 750000, 20);
```

```
insert into employee values (4, 'Sidharth', 'MP', 650000, 21);
```

```
insert into employee values (5, 'Mantu', 'Delhi', 900000, 22);
```

**PROGRAM CODE:**

```
DECLARE
```

```
PROCEDURE pro
```

```
AS
```

```
BEGIN
```

```
    dbms_output.put_line('It is working perfectly!');
```

```
END;
```

```
BEGIN
```

```
pro();
```

```
END;
```

```
/
```

## OUTPUT:

```
SQL> set serveroutput on;
SQL> ed pro;

SQL> @pro;
It is working perfectly!

PL/SQL procedure successfully completed.
```

## PL/SQL – CURSORS:

A cursor is used to referred to a program to fetch and process the rows returned by the SQL statement, one at a time. There are two types of cursors:

- Implicit Cursors
- Explicit Cursors

### IMPLICIT CURSOR:

Implicit cursors are automatically created by Oracle whenever an SQL statement is executed, when there is no explicit cursor for the statement.

#### 1 %FOUND

Returns TRUE if an INSERT, UPDATE, or DELETE statement affected one or more rows or a SELECT INTO statement returned one or more rows. Otherwise, it returns FALSE.

#### 2 %NOTFOUND

The logical opposite of %FOUND. It returns TRUE if an INSERT, UPDATE, or DELETE statement affected no rows, or a SELECT INTO statement returned no rows. Otherwise, it returns FALSE.

#### 3 %ISOPEN

Always returns FALSE for implicit cursors, because Oracle closes the SQL cursor automatically after executing its associated SQL statement.



#### **4 %ROWCOUNT**

Returns the number of rows affected by an INSERT, UPDATE, or DELETE statement, or returned by a SELECT INTO statement.

#### **EXPLICIT CURSOR:**

Explicit cursors are programmer-defined cursors for gaining more control over the context area.

**The syntax for creating an explicit cursor is –**

```
CURSOR cursor_name IS select_statement;
```

**Working with an explicit cursor includes the following steps –**

- Declaring the cursor for initializing the memory
- Opening the cursor for allocating the memory
- Fetching the cursor for retrieving the data
- Closing the cursor to release the allocated memory

#### **PROGRAM CODE:**

```
DECLARE
```

```
    e_id employee.emp_id%type;
```

```
    e_name employee.emp_name%type;
```

```
    e_city employee.city%type;
```

```
    cursor e_employee is
```

```
        select emp_id, emp_name, city from employee;
```

```
begin
```

```
    open e_employee;
```

```
    loop
```

```
fetch e_employee into e_id, e_name, e_city;

exit when e_employee%notfound;

dbms_output.put_line(e_id || ' ' || e_name || ' ' || e_city);

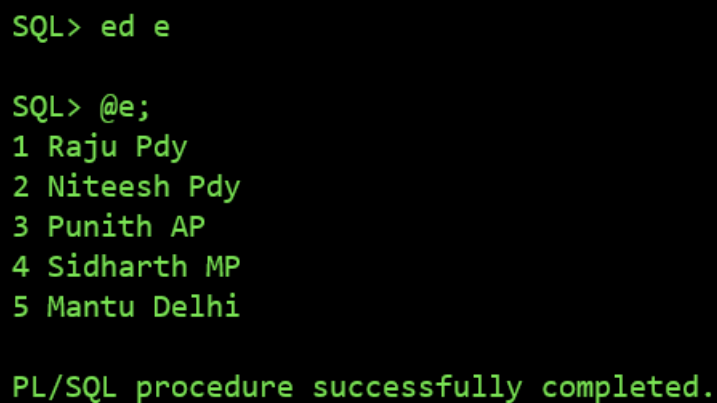
end loop;

close e_employee;

end;

/
```

#### OUTPUT:



```
SQL> ed e

SQL> @e;
1 Raju Pdy
2 Niteesh Pdy
3 Punith AP
4 Sidharth MP
5 Mantu Delhi

PL/SQL procedure successfully completed.
```

#### PL/SQL FUNCTION:

The PL/SQL Function is very similar to PL/SQL Procedure. The main difference between procedure and a function is, a function must always return a value, and on the other hand a procedure may or may not return a value.

#### Syntax to create a function:

```
CREATE [OR REPLACE] FUNCTION function_name [parameters]
```

```
[(parameter_name [IN | OUT | IN OUT] type [, ...])]
```

RETURN return\_datatype

{IS | AS}

BEGIN

< function\_body >

END [function\_name];

### **PROGRAM CODE:**

DECLARE

n number;

t number;

FUNCTION func

RETURN number IS

total number(2) := 0;

BEGIN

SELECT count(\*) into total

FROM employee;

RETURN total;

END;

BEGIN

n:=2;

t:=func();

dbms\_output.put\_line(t);

END;

/

#### OUTPUT:

```
SQL> set serveroutput on;
SQL> ed func;

SQL> @func;
5

PL/SQL procedure successfully completed.
```

#### RESULT:

Thus the queries for Procedure, Cursors and Functions were successfully executed and the output is noted.

Ex.No:08

## TRIGGERS

**Aim:**

To write a program and work with Triggers

**Procedure:**

Step1: Open MySQL workbench and connect to SQL .

Step 2: Then work with database using SQL queries and PL/SQL

**1.Trigger:**

**Syntax:** CREATE [OR REPLACE ] TRIGGER trigger\_name. {BEFORE | AFTER | INSTEAD OF } {INSERT [OR] | UPDATE [OR] | DELETE} [OF col\_name]

**Code:**

delimiter \$\$

create trigger neworderformedicine

after update on medic

for each row

begin

if new.quantity<20 then

insert into neworder values(new.mid,sysdate(),200);

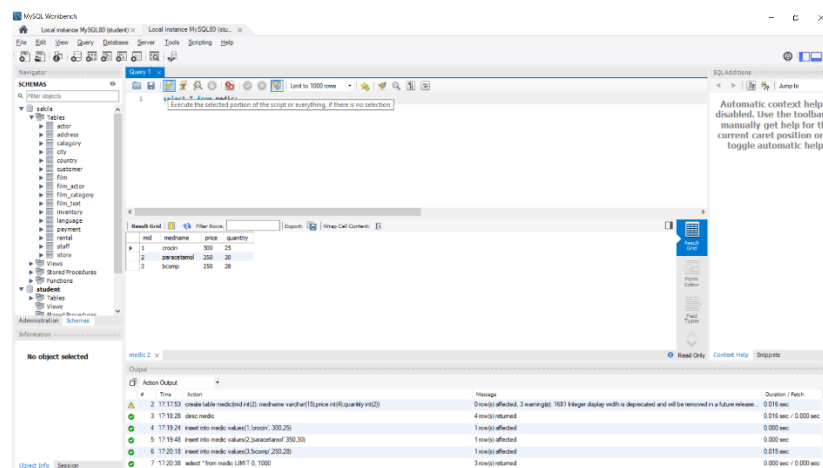
end if;

end;

\$\$

**OUTPUT:**

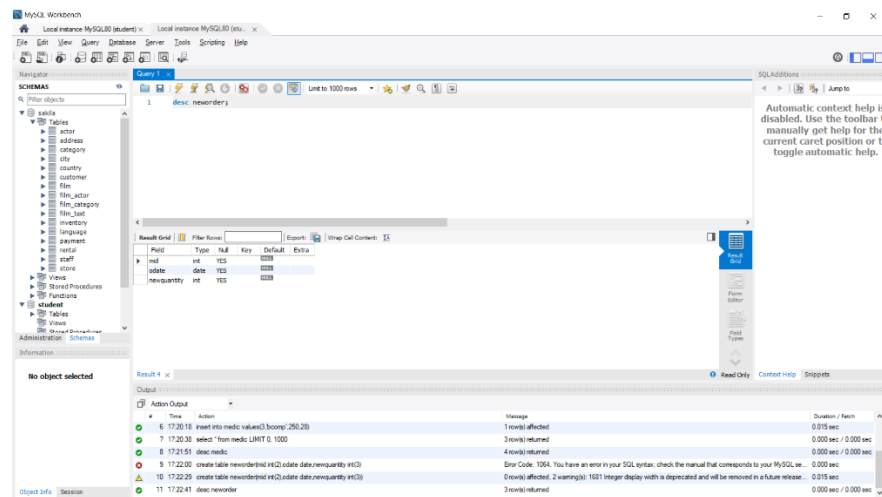
**Medic table:**



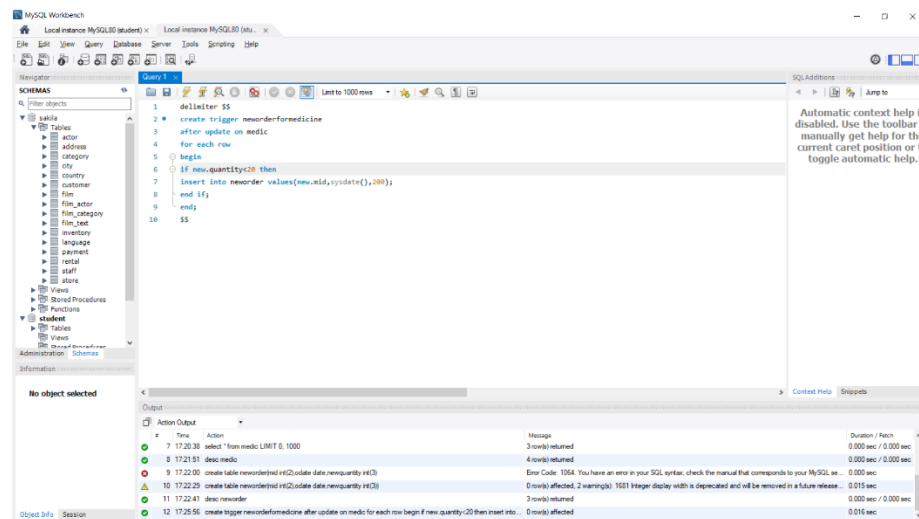
The screenshot shows the MySQL Workbench interface. On the left, the 'Schemas' pane shows the 'medic' database selected. The main window displays the 'medic' table structure with columns: mid, medicine, price, and quantity. The table contains three rows: 1 (couch, 300, 25), 2 (pill, 200, 20), and 3 (bump, 250, 28). The bottom pane shows the execution of a query that inserts data into the 'neworder' table. The output pane shows the results of the query, including the 'neworder' table structure and the inserted data.

#	Time	Action	Message	Duration / Patch
2	17:13:53	create table medic (mid int, medicine varchar(100), price int, quantity int)	0 rows affected, 3 warnings: 1001 Integer display width is deprecated and will be removed in a future release.	0.016 sec / 0.000 sec
3	17:13:29	insert into medic	4 rows affected	0.016 sec / 0.000 sec
4	17:13:24	insert into medic values(1,'couch',300,25)	1 row affected	0.000 sec / 0.000 sec
5	17:13:43	insert into medic values(2,'pill',200,20)	1 row affected	0.000 sec / 0.000 sec
6	17:20:18	insert into medic values(3,'bump',250,28)	1 row affected	0.016 sec / 0.000 sec
7	17:20:38	select * from medic LIMIT 3, 1000	3 rows affected	0.000 sec / 0.000 sec

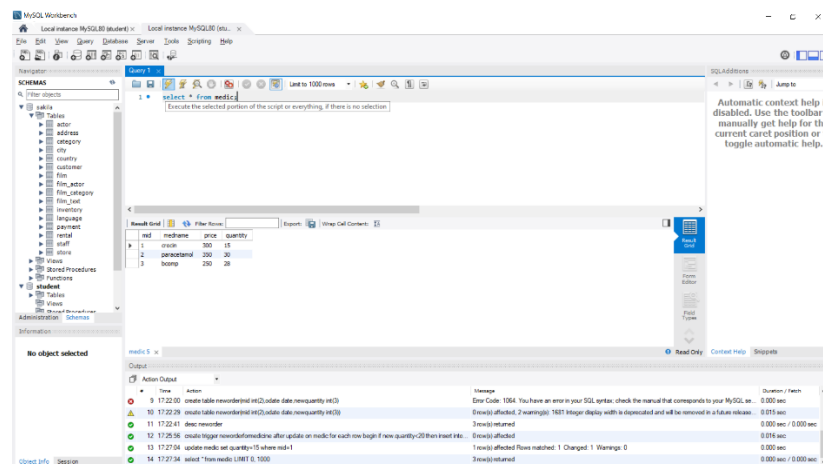
**Neworder table:**



**Trigger Query:**



**Updated table Medic:**



## Triggered table Neworder:

The screenshot shows the MySQL Workbench interface. The 'Query 1' editor contains the SQL query: `select * from neworder;`. The 'Results' pane displays a single row of data from the 'neworder' table:

id	order_date	newquantity
1	2023-03-04	200

The 'Output' pane at the bottom shows the execution log for 'neworder 6 x'.

#	Time	Action	Message	Duration / Fetch
10	17:22:29	create table neworder(id int(2),date date,newquantity int(3))	0 row(s) affected, 2 warning(s): 1651 Integer display width is deprecated and will be removed in a future release.	0.015 sec
11	17:22:41	desc neworder	3 row(s) returned	0.000 sec / 0.000 sec
12	17:23:56	create trigger neworderformedicine after update on medic for each row begin if new.quantity<20 then insert into ...	0 row(s) affected	0.016 sec
13	17:27:04	update medic set quantity=15 where mid=1	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0	0.000 sec
14	17:27:34	select *from medic LIMIT 0, 1000	3 row(s) returned	0.000 sec / 0.000 sec
15	17:27:47	select *from neworder LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec

## RESULT:

Thus the Trigger queries has been executed successfully

## STUDENT LOGIN PAGE

### ABSTRACT:

Creating an application project using SQL and PHP language. The application project is based on SQL and PHP language connected using XAMPP. The front-end of the program is written using HTML as markup language and CSS as style sheet. The back-end of the program is written using PHP programming language. The database connection is written using MySQL query language. The full development is executed using XAMPP localhost server.

### MODULE:

The entire project consists of five modules

1. config.php
2. dashboard.php
3. index.php
4. registration.php
5. style.css

### CODING:

#### I. Config.php:

```
<?php
define('DB_SERVER','localhost');
define('DB_USER','root');
define('DB_PASS','');
define('DB_NAME','dbms');
$con = mysqli_connect(DB_SERVER,DB_USER,DB_PASS,DB_NAME);
// Check connection
if (mysqli_connect_errno())
{
    echo "Failed to connect to MySQL: " . mysqli_connect_error();
}
?>
```

#### II. Dashboard.php:

```
<?php
session_start();
error_reporting(0);
include("config.php");
?>
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <link rel="stylesheet" href="style.css">
```



```

<link href='https://unpkg.com/boxicons@2.1.4/css/boxicons.min.css' rel='stylesheet'>

<title>Balan | Dashboard</title>

</head>
<body>
  <div class="box">
    <div class="container">

      <div class="top">
<header>Hi</header>

      </div>

      <div class="top">
<header>
  <h1>
<?php $query=mysqli_query($con,"select name from student where register='".
$_SESSION['login']."'");
while($row=mysqli_fetch_array($query))
{
    echo $row['name'];
} ?>
</h1>
</header>
</div>
      </div>
    </div>
  </div>
</body>
</html>

```

### 3.Index.php:

```

<?php
session_start();
error_reporting(0);
include("config.php");
if(isset($_POST['submit']))
{
    $ret=mysqli_query($con,"SELECT * FROM student WHERE register='".$_POST['register']."' and
password='".$_POST['password']."'");
    $num=mysqli_fetch_array($ret);
    if($num>0)
    {
        $extra="dashboard.php";//
        $_SESSION['login']=$_POST['register'];
        $_SESSION['id']=$num['id'];
        $host=$_SERVER['HTTP_HOST'];
        $uip=$_SERVER['REMOTE_ADDR'];
        $status=1;
    }
}

```

```

// For stroing log if user login successfull
$log=mysqli_query($con,"insert into userlog(uid,username,userip,status) values('".
$_SESSION['id'].",".$_SESSION['login'].",'$uip','$status')");
$uri=rtrim(dirname($_SERVER['PHP_SELF']),'/\');
header("location:http://$host$uri/$extra");
exit();
}
else
{
    // For stroing log if user login unsuccessful
    $_SESSION['login']=$_POST['register'];
    $uip=$_SERVER['REMOTE_ADDR'];
    $status=0;
    mysqli_query($con,"insert into userlog(username,userip,status) values('".
    $_SESSION['login'].",".$uip','$status')");
    $_SESSION['errmsg']="Invalid username or password";
    $extra="index.php";
    $host = $_SERVER['HTTP_HOST'];
    $uri = rtrim(dirname($_SERVER['PHP_SELF']),'/\');
    header("location:http://$host$uri/$extra");
    exit();
}
}
?>

```

```

<!DOCTYPE html>
<html lang="en">
    <head>
        <meta charset="UTF-8">
        <meta http-equiv="X-UA-Compatible" content="IE=edge">
        <meta name="viewport" content="width=device-width, initial-scale=1.0">
        <link rel="stylesheet" href="style.css">
        <link href="https://unpkg.com/boxicons@2.1.4/css/boxicons.min.css" rel='stylesheet'>

        <title>Balan | Login</title>

    </head>
    <body class="box">
        <div class="container">
            <div class="main-login col-xs-10 col-xs-offset-1 col-sm-8 col-sm-offset-2
col-md-4 col-md-offset-4">
                <div class="logo margin-top-30">

                    <div>

                        <form class="form-login " method="post">

                            <span style="color:red;"><?php echo
$_SESSION['errmsg']; ?><?php echo $_SESSION['errmsg']="";?></span>

```

```
<div class="form-group input-field">
  <input type="text" class="form-control input" name="register" placeholder="Username" >
  <i class='bx bx-user' ></i>
</div>
```

```
<div class="form-group input-field">
  <input type="Password" class="form-control input" name="password"
placeholder="Password" id="">
  <i class='bx bx-lock-alt'></i>
</div>
```

```

<div class="input-field form-actions">

  <button type="submit" class="submit
btn btn-primary pull-right" name="submit">
  Login <i class="fa fa-arrow-
circle-right"></i>
  </button>
</div>
```

```

<br>
<div class="new-account">

  Don't have an account yet?
  <a href="registration.php">
    Create an account
  </a>
</div>
```

```
</form>
```

```
</div>
```

```

  </div>
</div>
<script src="vendor/jquery/jquery.min.js"></script>
<script src="vendor/bootstrap/js/bootstrap.min.js"></script>
<script src="vendor/modernizr/modernizr.js"></script>
<script src="vendor/jquery-cookie/jquery.cookie.js"></script>
<script src="vendor/perfect-scrollbar/perfect-scrollbar.min.js"></script>
<script src="vendor/switchery/switchery.min.js"></script>
<script src="vendor/jquery-validation/jquery.validate.min.js"></script>
```

```

<script src="assets/js/main.js"></script>

<script src="assets/js/login.js"></script>
<script>
    jQuery(document).ready(function() {
        Main.init();
        Login.init();
    });
</script>

</body>
<!-- end: BODY -->
</html>

```

#### IV. Registration.php

```

<?php
include_once('config.php');
if(isset($_POST['submit']))
{
$name=$_POST['name'];
$register=$_POST['register'];
$gender=$_POST['gender'];
$email=$_POST['email'];
$password=$_POST['password'];
$query=mysqli_query($con,"insert into request(name,register,email,gender,password,requestDate)
values('$name','$register','$email','$gender','$password',curdate())");
if($query)
{
    echo "<script>alert('Successfully registered. You can login after few minutes ');</script>";
    //header('location:index.php');
}
else {
echo "<script>alert('request unsuccessfully');</script>";
}
}
?>

```

```

<!DOCTYPE html>
<html lang="en">

    <head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <link rel="stylesheet" href="style.css">
    <link href='https://unpkg.com/boxicons@2.1.4/css/boxicons.min.css' rel='stylesheet'>

    <title>Balan | Register</title>

```

```

        <script type="text/javascript">
function valid()
{
    if(document.registration.password.value!= document.registration.password_again.value)
    {
        alert("Password and Confirm Password Field do not match !!");
        document.registration.password_again.focus();
        return false;
    }
    return true;
}
</script>

</head>

<body class="box">
    <!-- start: REGISTRATION -->
    <div class="container">

        <div class="main-login col-xs-10 col-xs-offset-1 col-sm-8 col-sm-
offset-2 col-md-4 col-md-offset-4">
            <!-- start: REGISTER BOX -->
            <div class="box-register">
                <form name="registration" id="registration" method="post"
onSubmit="return valid();">

                    <legend>
                        Register
                    </legend>
                    <p>
                        Enter your details below:
                    </p>
                    <div class="input-field form-group">
                        <span>
                            <input type="text" class="input form-
control" name="name" placeholder="Full Name" required>
                        </span>
                    </div>

                    <div class="form-group input-field">
                        <span>
                            <input type="text" class="input form-
control" name="register" placeholder="Register no." required>
                        </span>
                    </div>

                    <div class="form-group input-field">
                        <label class="input-field">
                            Gender
                        </label>

```

```

<span>
female" name="gender" value="female" >

name="gender" value="male">

</span>

<div class="clip-radio radio-primary">

    <input type="radio" id="rg-

    <label for="rg-female">
        Female
    </label>

    <input type="radio" id="rg-male"

    <label for="rg-male">
        Male
    </label>

</div>
</div>

<div class="form-group input-field">
    <span class="input-icon">
        <input type="email"
class="form-control input" name="email" id="email" onBlur="userAvailability()"
placeholder="Email" required>

        <i class="fa fa-envelope"></i>

</span>

</div>
<div class="form-group input-field">
    <span class="input-icon">
        <input type="password"
class="form-control input" id="password" name="password" placeholder="Password" required>
        <i class="fa fa-lock"></i>

</span>

</div>
<div class="form-group input-field">
    <span class="input-icon">
        <input type="password"
class="form-control input" id="password_again" name="password_again" placeholder="Password
Again" required>
        <i class="fa fa-lock"></i>

</span>

</div>

<div class="form-actions input-field">
    <p>
        Already have an account?
        <a href="index.php">
            Log-in
        </a>
    </p>
    <button type="submit" class="submit
btn btn-primary pull-right" id="submit" name="submit">
        Submit <i class="fa fa-arrow-
circle-right"></i>

```

```

        </button>
    </div>

</form>

<div class="copyright">
    <span class="current-year"></span>.
<span>Balan&copy;All rights reserved</span>
</div>

</div>

</div>
</div>
<script src="vendor/jquery/jquery.min.js"></script>
<script src="vendor/bootstrap/js/bootstrap.min.js"></script>
<script src="vendor/modernizr/modernizr.js"></script>
<script src="vendor/jquery-cookie/jquery.cookie.js"></script>
<script src="vendor/perfect-scrollbar/perfect-scrollbar.min.js"></script>
<script src="vendor/switchery/switchery.min.js"></script>
<script src="vendor/jquery-validation/jquery.validate.min.js"></script>
<script src="assets/js/main.js"></script>
<script src="assets/js/login.js"></script>
<script>
    jQuery(document).ready(function() {
        Main.init();
        Login.init();
    });
</script>

<script>
function userAvailability() {
    $("#loaderIcon").show();
    jQuery.ajax({
        url: "check_availability.php",
        data:'email='+$("#email").val(),
        type: "POST",
        success:function(data){
            $("#user-availability-status1").html(data);
            $("#loaderIcon").hide();
        },
        error:function (){}
    });
}
</script>

</body>
<!-- end: BODY -->
</html>

```

## V. Style.css

```
@import url('https://fonts.googleapis.com/css2?
family=Nunito:wght@400;600;800&display=swap');
*{
  font-family: 'poppins' ,sans-serif;
}
body{
  background-image: url("images/1.jpg");
  background-size: cover;
  background-position: center;
  background-attachment: fixed;
  background-repeat: no-repeat;

}
.box{
  display: flex;
  justify-content: center;
  align-items: center;
  min-height: 90vh;
}
.container{
  width: 350px;
  display: flex;
  flex-direction: column;
  padding: 0 15px 0 15px;

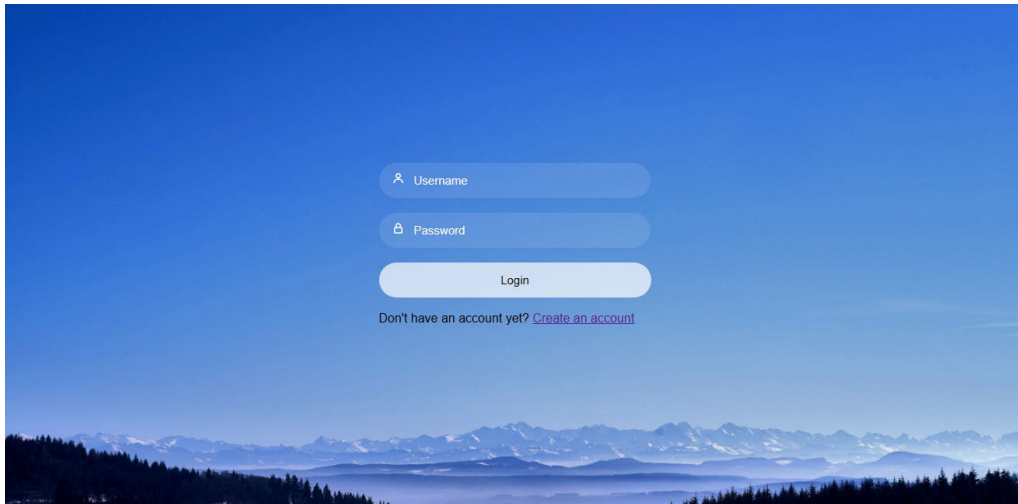
}
span{
  color: #fff;
  font-size: small;
  display: flex;
  justify-content: center;
  padding: 10px 0 10px 0;
}
header{
  color: #fff;
  font-size: 30px;
  display: flex;
  justify-content: center;
  padding: 10px 0 10px 0;
}

.input-field .input{
  height: 45px;
  width: 87%;
  border: none;
  border-radius: 30px;
  color: #fff;
  font-size: 15px;
  padding: 0 0 0 45px;
  background: rgba(255,255,255,0.1);
```



```
    outline: none;
}
i{
    position: relative;
    top: -33px;
    left: 17px;
    color: #fff;
}
::-webkit-input-placeholder{
    color: #fff;
}
.submit{
    border: none;
    border-radius: 30px;
    font-size: 15px;
    height: 45px;
    outline: none;
    width: 100%;
    color: black;
    background: rgba(255,255,255,0.7);
    cursor: pointer;
    transition: .3s ;
}
.submit:hover{
    box-shadow: 1px 5px 7px 1px rgba(0, 0, 0, 0.2);
}
.two-col{
    display: flex;
    flex-direction: row;
    justify-content: space-between;
    color: #fff;
    font-size: small;
    margin-top: 10px;
}
.one{
    display: flex;
}
label a{
    text-decoration: none;
    color: #fff;
}
```

## OUTPUT:



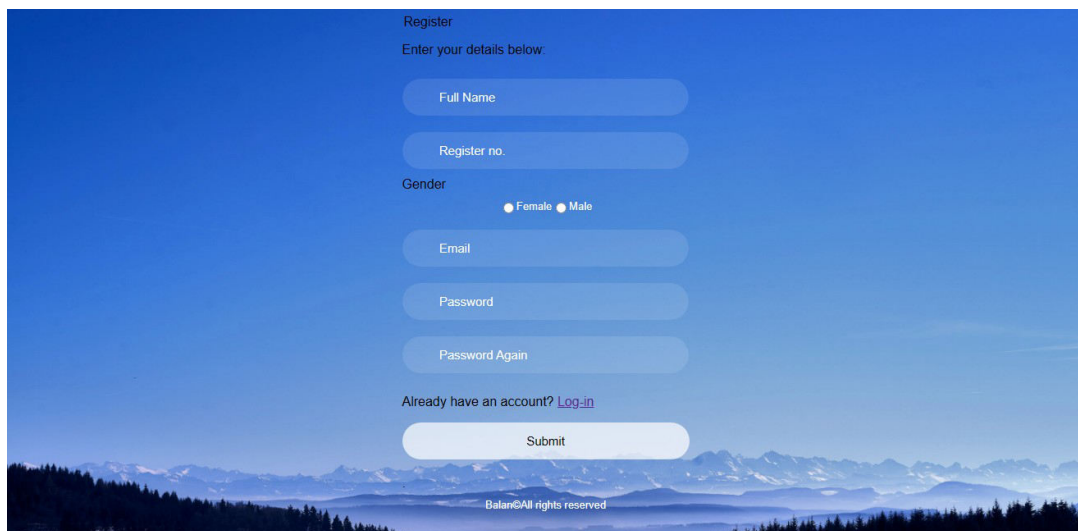
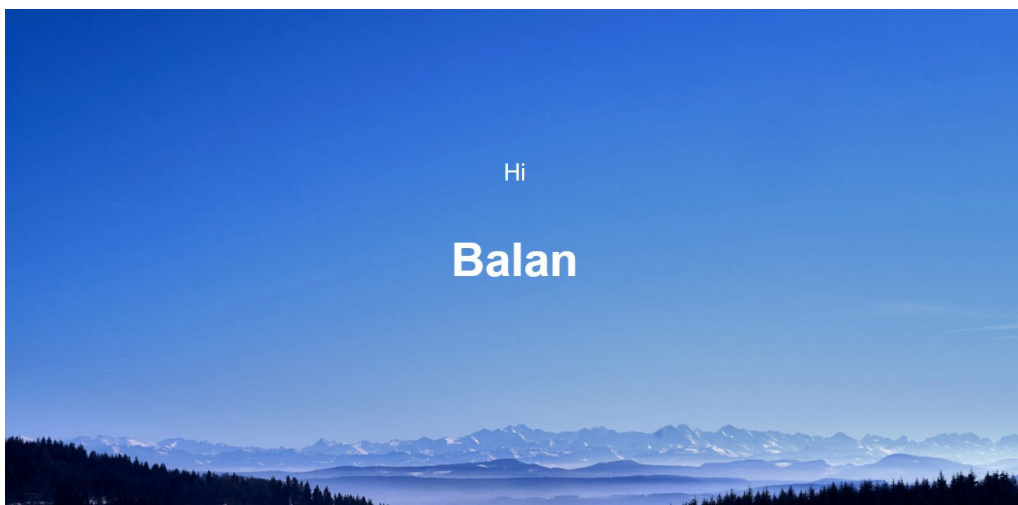
A login form is centered on a blue background with a mountain range at the bottom. The form consists of three rounded rectangular input fields: the first is labeled 'Username' with a small user icon, the second is labeled 'Password' with a small lock icon, and the third is a 'Login' button. Below the password field, there is a link that says 'Don't have an account yet? [Create an account](#)'.

Username

Password

Login

Don't have an account yet? [Create an account](#)



A registration form is centered on a blue background with a mountain range at the bottom. The form starts with the heading 'Register' and the instruction 'Enter your details below:'. It contains five rounded rectangular input fields: 'Full Name', 'Register no.', 'Email', 'Password', and 'Password Again'. Below the 'Password' field, there is a 'Gender' section with two radio buttons labeled 'Female' and 'Male'. Below the 'Password Again' field, there is a link that says 'Already have an account? [Log-in](#)'. At the bottom of the form is a 'Submit' button. At the very bottom of the page, there is a small copyright notice: 'Balan©All rights reserved'.

Register

Enter your details below:

Full Name

Register no.

Gender

☐ Female ☒ Male

Email

Password

Password Again

Already have an account? [Log-in](#)

Submit

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