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| **Ex.No.1**  **09.01.2025** | **DATA DEFINITION LANGUAGE, COMMANDS AND INTEGRITY CONSTRAINTS** |

**AIM**

To execute Data Definition Language commands and Integrity Constraints.

**CREATING TABLE**

SQL> create table stud\_detail(id number(5),snames varchar(20),phone\_no number(12),age number(20));

Table created.

**INSERTING VALUES**

SQL> insert into stud\_detail(&id,'&snames',&phone\_no,&age);

Enter value for id: 10001

Enter value for snames: Karthi Enter value for phone\_no: 9874561232 Enter value for age: 19

SQL> insert into stud\_detail values(&id,'&snames',&phone\_no,&age);

Enter value for id: 10002

Enter value for snames: Deepak

Enter value for phone\_no: 8794561232

Enter value for age: 18

SQL> insert into stud\_detail values(&id,'&snames',&phone\_no,&age);

Enter value for id: 10003

Enter value for snames: Mithun

Enter value for phone\_no: 7894561232

Enter value for age: 19

SQL> insert into stud\_detail values(&id,'&snames',&phone\_no,&age);

Enter value for id: 10004

Enter value for snames: Naresh

Enter value for phone\_no: 6987451232

Enter value for age: 19

SQL> insert into stud\_detail values(&id,'&snames',&phone\_no,&age);

Enter value for id: 10005

Enter value for snames: Dhyanesh

Enter value for phone\_no: 6985471232

Enter value for age: 19

**DISPLAY TABLE**

SQL> select \* from stud\_detail;

ID SNAMES PHONE\_NO AGE

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10001 Karthi 9874561232 18

10002 Deban 8794561232 18

10003 Mithun 7894561232 19

10004 Naresh 6987451232 19

10005 Dhyanesh 6985471232 19

**MODIFYING THE STRUCTURE OF TABLES**

**a)Add new columns**

SQL> alter table stud\_detail add(year number(5) default '2');

Table altered.

SQL> select \* from stud\_detail;

ID SNAMES PHONE\_NO AGE YEAR

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10001 Karthi 9874561232 19 2

10002 Deban 8794561232 18 2

10003 Rupak 7894561232 18 2

10004 Naresh 6987451232 18 2

10005 Dhyanesh 6985471232 18 2

**b) Dropping a column from a table**

SQL> alter table stud\_detail drop column year;

Table altered.

SQL> select \* from stud\_detail;

ID SNAMES PHONE\_NO AGE

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10001 Karthi 9874561232 19

10002 Deban 8794561232 18

10003 Rupak 7894561232 19

10004 Naresh 6987451232 19

10005 Dhyanesh 6985471232 19

**MODIFYING EXISITING COLUMNS**

SQL> alter table stud\_detail modify(age number(25));

Table altered.

SQL>descstud\_detail;

Name Null? Type

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ID NUMBER(5)

SNAMES VARCHAR2(20)

PHONE\_NO NUMBER(12)

AGE NUMBER(25)

**RENAMING THE TABLES**

SQL> rename stud\_detail to studdent\_det;

Table renamed.

SQL> select \* from student\_det;

ID SNAMES PHONE\_NO AGE

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10001 Karthi 9874561232 19

10002 Deepak 8794561232 18

10003 Rupak 7894561232 18

10004 Naresh 6987451232 18

10005 Dhyanesh 6985471232 18

**TRUNCATING THE TABLES**

SQL> truncate table student\_det;

Table truncated.

SQL> select \* from student\_det;

no rows selected

**DESTROYING TABLES**

SQL> drop table studdent\_det;

Table dropped.

SQL> select \* from studdent\_det;

select \* from student\_det

ERROR at line 1:

ORA-00942: table or view does not exist

**CONSTRAINTS**

SQL> create table stud\_det(id number(5) PRIMARY KEY,name varchar(20) NOT NULL UNIQUE,phone\_no number(12),age number(20) NOT NULL CHECK(age>=18),year number(2) DEFAULT '2');

Table created.

SQL> insert into stud\_det values(&id,'&name',&phone\_no,&age,&year);

Enter value for id: 10001

Enter value for name: Karthi

Enter value for phone\_no: 9874563212

Enter value for age: 18

Enter value for year: 2

1 row created.

**NOT NULL CONSTRAINT**

SQL> insert into stud\_det values(&id,'&name',&phone\_no,&age,&year);

Enter value for id: 10005

Enter value for name:

Enter value for phone\_no: 5897461232

Enter value for age: 18

Enter value for year: 1

old 1: insert into stud\_det values(&id,'&name',&phone\_no,&age,&year)

new 1: insert into stud\_detvalues(10005,'',5897461232,18,1)

insert into stud\_detvalues(10005,'',5897461232,18,1)

\*

ERROR at line 1:

ORA-00947: not enough values

**DEFAULT CONSTAINT**

SQL> alter table stud\_detadd(attendance\_percentage number(4) DEFAULT '100');

Table altered.

SQL> select \* from stud\_det;

ID NAME PHONE\_NO AGE YEAR ATTENDANCE\_PERCENTAGE

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10001 Karthi 9874563212 19 2 100

10002 Deban 8974561232 18 3 100

10003 Ram 8961475212 18 4 100

**UNIQUE CONSTRAINT**

SQL> insert into stud\_det values(&id,'&name',&phone\_no,&age,&year);

Enter value for id: 10004

Enter value for name: Karthi

Enter value for phone\_no: 8745693215

Enter value for age: 19

Enter value for year: 2

old 1: insert into stud\_det values(&id,'&name',&phone\_no,&age,&year)

new 1: insert into stud\_det values(10004,'Karthi',8745693215,19,2)

insert into stud\_det values(10004,'Karthi',8745693215,19,2)

\*

ERROR at line 1:

ORA-00001: unique constraint (STUDDENT.SYS\_C004109) violated

**PRIMARY CONSTRAINT**

SQL> insert into stud\_det values(&id,'&name',&phone\_no,&age,&year);

Enter value for id: 10001

Enter value for name: Rajesh

Enter value for phone\_no: 8745692132

Enter value for age: 18

Enter value for year: 2

old 1: insert into stud\_det values(&id,'&name',&phone\_no,&age,&year)

new 1: insert into stud\_det values(10001,'Rajesh',8745692132,18,2)

insert into stud\_det values(10001,'Rajesh',8745692132,18,2)

\*

ERROR at line 1:

ORA-00001: unique constraint (STUDDENT.SYS\_C004108) violated

**CHECK CONSTRAINT**

SQL> insert into stud\_det values(&id,'&name',&phone\_no,&age,&year);

Enter value for id: 10004

Enter value for name: Naresh

Enter value for phone\_no: 8563291474

Enter value for age: 15

Enter value for year: 2

old 1: insert into stud\_det values(&id,'&name',&phone\_no,&age,&year)

new 1: insert into stud\_det values(10003,'Naresh',8563291474,15,2)

insert into stud\_det values(10004,'Naresh',8563291474,15,2)

\*

ERROR at line 1:

ORA-02290: check constraint (STUDDENT.SYS\_C004107) violated

**DROPPING CONSTRAINT**

create table studdent (name char(20),age int not null check(age>=18),id int not null primary key,dept char(10),section char(1));

Table created.

SQL> alter table studdent drop primary key;

Table altered.

SQL>desc studdent;

Name Null? Type

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NAME CHAR(20)

AGE NOT NULL NUMBER(38)

ID NOT NULL NUMBER(38)

DEPT CHAR(10)

SECTION CHAR(1)

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| CONTENTS | MARKS ALLOTTED | MARKS OBTAINED |
| Aim, Algorithm, SQL, PL/SQL | **30** |  |
| Execution and Result | **20** |  |
| Viva | **10** |  |
| Total | **60** |  |

**RESULT:**

Thus Data Defination Language commands and Integrity Constraints were executed.