

ExNo: 1

DDL, DML AND INTEGRITY CONSTRAINTS

Date:

AIM:

To demonstrate DDL commands such as create, alter, drop, truncate, rename, DML commands such as Insert, Update, Delete and Integrity Constraint such as Primary key, Foreign key, Unique key, Default, Null and Not Null for Laptop Service Management System.

DDL COMMANDS:

CREATE

```
SQL> create table Customer(cid number(10),cname varchar(30),phno number(10),constraint pk3 primary key(cid));
```

Table created.

DESCRIBE A TABLE

```
SQL> desc Customer;
```

Name	Null?	Type

CID	NOT NULL	NUMBER(10)
CNAME		VARCHAR2(30)
PHNO		NUMBER(10)

ALTER

```
SQL> alter table Customer add age number(3);
```

Table altered.

```
SQL> desc Customer;
```

Name	Null?	Type

CID	NOT NULL	NUMBER(10)
CNAME		VARCHAR2(30)
PHNO		NUMBER(10)
AGE		NUMBER(3)

MODIFY

SQL> alter table Customer modify age varchar(3);

Table altered.

SQL> desc Customer;

Name	Null?	Type

CID	NOT NULL	NUMBER(10)
CNAME		VARCHAR2(30)
PHNO		NUMBER(10)
AGE		VARCHAR2(3)

RENAME

SQL> rename Customer to customer_details;

Table renamed.

TRUNCATE

SQL> truncate table customer_details;

Table truncated.

SQL> desc customer_details;

Name	Null?	Type

CID	NOT NULL	NUMBER(10)
CNAME		VARCHAR2(30)
PHNO		NUMBER(10)
AGE		VARCHAR2(3)

SQL> select * from customer_details;

no rows selected

DROP

SQL> drop table customer_details;

Table dropped.

SQL> select * from customer_details;

select * from customer_details

*

ERROR at line 1:

ORA-00942: table or view does not exist

DML COMMANDS

SQL> create table Customer(cid number(3),cname varchar(30),phno number(10),constraint pk3 primary key(cid));

Table created.

INSERT

SQL> insert into Customer values (1,'rahu',9876556789);

1 row created.

SQL> insert into Customer values(&cid,&cname,&phno);

Enter value for cid: 2

Enter value for cname: nidha

Enter value for phno: 8388898988

old 1: insert into Customer values(&cid,&cname,&phno)

new 1: insert into Customer values(2,'nidha',8388898988)

1 row created.

SQL> /

Enter value for cid: 3

Enter value for cname: nilan

Enter value for phno: 9234567898

old 1: insert into Customer values(&cid,&cname,&phno)

new 1: insert into Customer values(3,'nilan',9234567898)

1 row created.

UPDATE

SQL> update Customer set cname='nandhu' where cid=3;

1 row updated.

SQL> select* from Customer;

CID	CNAME	PHNO
1	rahu	9876556789

2	nidha	9234567898
3	nandhu	9234567898

SQL> delete from Customer where cid<3;

2 rows deleted.

SQL> select* from Customer;

CID	CNAME	PHNO
3	nandhu	9234567898

INTEGRITY CONSTRAINTS

SQL> create table Customer(cid number(3),cname varchar(30),age number(3) constraint ch
check(age>=18),phno number(10),constraint pk3 primary key(cid));

Table created.

SQL> create table Service(sid number(3) constraint pk4 primary key,cid number(3),fname
varchar(15) not null,lname varchar(15) null,issue varchar(15) not null,model
varchar(20),phno number(10),constraint fk2 foreign key(cid) references Customer(cid));

Table created.

SQL> insert into Customer values(&cid,&cname,&age,&phno);

Enter value for cid: 1

Enter value for cname: bharathi

Enter value for age: 42

Enter value for phno: 9942787433

old 1: insert into Customer values(&cid,&cname,&age,&phno')

new 1: insert into Customer values(1,'bharathi',42,'9942787433')

1 row created.

SQL> /

Enter value for cid: 2

Enter value for cname: karthi

Enter value for age: 22

Enter value for phno: 9234566543

old 1: insert into Customer values(&cid,&cname,&age,&phno')

new 1: insert into Customer values(2,'karthi',22,'9234566543')

1 row created.

SQL> /

Enter value for cid: 3

Enter value for cname: sibi

Enter value for age: 21

Enter value for phno: 9898985678

old 1: insert into Customer values(&cid,&cname,&age,&phno')

new 1: insert into Customer values(3,'sibi',21,'9898985678')

1 row created.

SQL> /

Enter value for cid: 4

Enter value for cname: suriya

Enter value for age: 23

Enter value for phno: 7569842310

old 1: insert into Customer values(&cid,&cname,&age,&phno')

new 1: insert into Customer values(4,'suriya',12,'7569842310')

insert into Customer values(4,'suriya',12,'7569842310')

*

ERROR at line 1:

ORA-02290: check constraint (SYSTEM.CH) violated

SQL> select * from customer;

CID	CNAME	AGE	PHNO
1	bharathi	42	9942787433
2	karthi	22	9234566543
3	sibi	21	9898985678

SQL> desc customer;

Name	Null?	Type
CID	NOT NULL	NUMBER(10)
CNAME		VARCHAR2(30)
AGE		NUMBER(3)
PHNO		NUMBER(10)

SQL> insert into Service values(&sid,&cid,&fname','&lname','&issue','&model',&phno);

Enter value for sid: 1

Enter value for cid: 1

Country	Year	Population (millions)	Urban population (millions)	Urban population (%)	Population density (per sq km)	Urban population density (per sq km)
Algeria	1980	10.5	4.5	42.9	105	105
Algeria	1985	11.5	5.5	47.8	115	115
Algeria	1990	12.5	6.5	52.0	125	125
Algeria	1995	13.5	7.5	55.6	135	135
Algeria	2000	14.5	8.5	58.6	145	145
Algeria	2005	15.5	9.5	61.3	155	155
Algeria	2010	16.5	10.5	63.6	165	165
Algeria	2015	17.5	11.5	65.7	175	175
Algeria	2020	18.5	12.5	67.6	185	185
Algeria	2025	19.5	13.5	69.2	195	195
Algeria	2030	20.5	14.5	70.7	205	205
Algeria	2035	21.5	15.5	72.1	215	215
Algeria	2040	22.5	16.5	73.3	225	225
Algeria	2045	23.5	17.5	74.5	235	235
Algeria	2050	24.5	18.5	75.5	245	245
Algeria	2055	25.5	19.5	76.5	255	255
Algeria	2060	26.5	20.5	77.4	265	265
Algeria	2065	27.5	21.5	78.2	275	275
Algeria	2070	28.5	22.5	78.9	285	285
Algeria	2075	29.5	23.5	79.7	295	295
Algeria	2080	30.5	24.5	80.3	305	305
Algeria	2085	31.5	25.5	81.0	315	315
Algeria	2090	32.5	26.5	81.6	325	325
Algeria	2095	33.5	27.5	82.1	335	335
Algeria	2100	34.5	28.5	82.6	345	345
Algeria	2105	35.5	29.5	83.1	355	355
Algeria	2110	36.5	30.5	83.6	365	365
Algeria	2115	37.5	31.5	84.0	375	375
Algeria	2120	38.5	32.5	84.4	385	385
Algeria	2125	39.5	33.5	84.8	395	395
Algeria	2130	40.5	34.5	85.2	405	405
Algeria	2135	41.5	35.5	85.5	415	415
Algeria	2140	42.5	36.5	85.9	425	425
Algeria	2145	43.5	37.5	86.2	435	435
Algeria	2150	44.5	38.5	86.5	445	445
Algeria	2155	45.5	39.5	86.8	455	455
Algeria	2160	46.5	40.5	87.1	465	465
Algeria	2165	47.5	41.5	87.4	475	475
Algeria	2170	48.5	42.5	87.7	485	485
Algeria	2175	49.5	43.5	88.0	495	495
Algeria	2180	50.5	44.5	88.3	505	505
Algeria	2185	51.5	45.5	88.5	515	515
Algeria	2190	52.5	46.5	88.8	525	525
Algeria	2195	53.5	47.5	89.0	535	535
Algeria	2200	54.5	48.5	89.2	545	545
Algeria	2205	55.5	49.5	89.4	555	555
Algeria	2210	56.5	50.5	89.6	565	565
Algeria	2215	57.5	51.5	89.8	575	575
Algeria	2220	58.5	52.5	90.0	585	585
Algeria	2225	59.5	53.5	90.1	595	595
Algeria	2230	60.5	54.5	90.2	605	605
Algeria	2235	61.5	55.5	90.3	615	615
Algeria	2240	62.5	56.5	90.4	625	625
Algeria	2245	63.5	57.5	90.5	635	635
Algeria						

1 1 bharathi p battery damage 'dell ins 15
9942787433

2 2 karthi screen damage hp 14s 9234566543

Conduct of Experiment(30)	
Record (20)	
Viva (10)	
Total(60)	

RESULT:

Thus the DDL commands such as create, alter, drop, truncate, rename, DML commands such as Insert, Update, Delete and Integrity Constraint such as Primary key, Foreign key, Unique key, Default, Null and Not Null was executed successfully.