DBMS

ASSIGNMENT NO:-1

SQL> connect

Enter user-name: system

Enter password:

Connected.

Q.1)

1)

SQL> create table customer(custno number(4),custname char(15),city varchar(15),state varchar(15));

Table created.

SQL> desc customer;

Name	Null?	Type
CUSTNO		NUMBER(4)
CUSTNAME		CHAR(15)
CITY		VARCHAR2(15)
STATE		VARCHAR2(15)

SQL> insert into customer values(&custno,'&custname','&city','&state');

Enter value for custno: 1

Enter value for custname: aaa

Enter value for city: mumbai

Enter value for state: maharashtra

old 1: insert into customer values(&custno,'&custname','&city','&state')

new 1: insert into customer values(1,'aaa','mumbai','maharashtra')

1 row created.

SQL> /

Enter value for custno: 2

Enter value for custname: bbb

Enter value for city: pune

Enter value for state: maharashtra

old 1: insert into customer values(&custno,'&custname','&city','&state')

new 1: insert into customer values(2,'bbb','pune','maharashtra')

1 row created.

SQL> /

Enter value for custno: 3

Enter value for custname: ccc

Enter value for city: jaipur

Enter value for state: rajasthan

old 1: insert into customer values(&custno,'&custname','&city','&state')

new 1: insert into customer values(3,'ccc','jaipur','rajasthan')

1 row created.

SQL> /

Enter value for custno: 4

Enter value for custname: ddd

Enter value for city: indore

Enter value for state: madhya pradesh

old 1: insert into customer values(&custno,'&custname','&city','&state')

new 1: insert into customer values(4,'ddd','indore','madhya pradesh')

1 row created.

SQL> /

Enter value for custno: 5

Enter value for custname: eee

Enter value for city: bhopal

Enter value for state: madhya pradesh

old 1: insert into customer values(&custno,'&custname','&city','&state')

new 1: insert into customer values(5,'eee','bhopal','madhya pradesh')

1 row created.

SQL> /

Enter value for custno: 6

Enter value for custname: fff

Enter value for city: surat

Enter value for state: gujarat

old 1: insert into customer values(&custno,'&custname','&city','&state')

new 1: insert into customer values(6,'fff','surat','gujarat')

1 row created.

SQL> /

Enter value for custno: 7

Enter value for custname: ggg

Enter value for city: baroda

Enter value for state: gujarat

old 1: insert into customer values(&custno,'&custname','&city','&state')

new 1: insert into customer values(7,'ggg','baroda','gujarat')

1 row created.

SQL> /

Enter value for custno: 8

Enter value for custname: hhh

Enter value for city: hydrabad

Enter value for state: telangana

old 1: insert into customer values(&custno,'&custname','&city','&state')

new 1: insert into customer values(8,'hhh','hydrabad','telangana')

1 row created.

SQL> desc customer;

Name	Null?	Type
CUSTNO		NUMBER(4)
CUSTNAME		CHAR(15)
CITY		VARCHAR2(15)
STATE		VARCHAR2(15)

SQL> select *from customer;

CUSTNO	CUSTNAME	CITY	STATE

---------- --------------- --------------- ---------------

1	aaa	mumbai	maharashtra
2	bbb	pune	maharashtra
3	ccc	jaipur	rajasthan
4	ddd	indore	madhya pradesh
5	eee	bhopal	madhya pradesh
6	fff	surat	gujarat
7	ggg	baroda	gujarat
8	hhh	hyadrabad	telangana

8 rows selected.

Q.1)

1)

SQL> create table item(itemno number(4),itemname char (15),price number(15),qty number(15));

Table created.

SQL> desc item

Name	Null?	Type
ITEMNO		NUMBER(4)
ITEMNAME		CHAR(15)
PRICE		NUMBER(15)
QTY		NUMBER(15)

```
SQL> insert into item values(&itemno,'&itemname',&price,&qty);
Enter value for itemno: 1
Enter value for itemname: coffee
Enter value for price: 200
Enter value for qty: 20
old   1: insert into item values(&itemno,'&itemname',&price,&qty)
new   1: insert into item values(1,'coffee',200,20)

1 row created.

SQL> /
Enter value for itemno: 2
Enter value for itemname: roti
Enter value for price: 100
Enter value for qty: 30
old   1: insert into item values(&itemno,'&itemname',&price,&qty)
new   1: insert into item values(2,'roti',100,30)

1 row created.


SQL> /
Enter value for itemno: 3
Enter value for itemname: chapati
Enter value for price: 70
Enter value for qty: 100
old   1: insert into item values(&itemno,'&itemname',&price,&qty)
new   1: insert into item values(3,'chapati',70,100)
```

1 row created.

SQL> /

Enter value for itemno: 4

Enter value for itemname: tea

Enter value for price: 20

Enter value for qty: 70

old 1: insert into item values(&itemno,'&itemname',&price,&qty)

new 1: insert into item values(4,'tea',20,70)

1 row created.

SQL> /

Enter value for itemno: 5

Enter value for itemname: idli

Enter value for price: 110

Enter value for qty: 50

old 1: insert into item values(&itemno,'&itemname',&price,&qty)

new 1: insert into item values(5,'idli’,110,50)

1 row created.

SQL> /

Enter value for itemno: 6

Enter value for itemname: vada

Enter value for price: 40

Enter value for qty: 60

```
old   1: insert into item values(&itemno,'&itemname',&price,&qty)
new   1: insert into item values(6,'vada',40,60)

1 row created.

SQL> /
Enter value for itemno: 7
Enter value for itemname: paneer
Enter value for price: 400
Enter value for qty: 75
old   1: insert into item values(&itemno,'&itemname',&price,&qty)
new   1: insert into item values(7,'paneer',400,75)

1 row created.

SQL> /
Enter value for itemno: 8
Enter value for itemname: rice
Enter value for price: 450
Enter value for qty: 100
old   1: insert into item values(&itemno,'&itemname',&price,&qty)
new   1: insert into item values(8,'rice',450,100)

1 row created.

SQL> desc item
 Name                          Null?    Type
 ----------------------------------------- -------- ----------------------------
 ITEMNO                                   NUMBER(4)
```

ITEMNAME CHAR(15)

PRICE NUMBER(15)

QTY NUMBER(15)

SQL> select * from item 2;

ITEMNO	ITEMNAME	PRICE	QTY
1	coffee	200	20
2	roti	100	30
3	chapati	70	100
4	tea	20	70
5	idli	110	50
6	vada	40	60
7	paneer	400	75
8	rice	450	100

8 rows selected.

2)

SQL> select custname from customer;

CUSTNAME

---

aaa

bbb

ccc

ddd

eee

fff

ggg

hhh

8 rows selected.

3)

SQL> select custname,city from customer;

CUSTNAME CITY

--- ---

aaa mumbai

bbb pune

ccc jaipur

ddd indore

eee bhopal

fff indore

ggg baroda

hhh hydrabad

8 rows selected.

4)

SQL> select itemname from item;

ITEMNAME

---

coffee

roti

chapati

tea

idli

vada

paneer

rice

8 rows selected.

5)

SQL> alter table item add colour varchar(10);

Table altered.

Name	Null?	Type
ITEMNO		NUMBER(4)
ITEMNAME		CHAR(15)
PRICE		NUMBER(15)
QTY		NUMBER(15)
COLOUR		VARCHAR2(10)

6)

SQL> alter table item rename column price to 2 itemprice ;

Table altered.

Name	Null?	Type
ITEMNO		NUMBER(4)
ITEMNAME		CHAR(15)
ITEMPRICE		NUMBER(15)
QTY		NUMBER(15)
COLOUR		VARCHAR2(10)

7)

```
SQL> select itemname,itemprice,qty,(itemprice * qty) as total_value from item;
```

ITEMNAME	ITEMPRICE	QTY	TOTAL_VALUE
coffee	200	20	4000
roti	100	30	3000
chapati	70	100	7000
tea	20	70	1400
idli	110	50	5500
vada	40	60	2400
paneer	400	75	30000
rice	450	100	45000

8 rows selected.

8)

```
SQL>  select *from customer where state='rajasthan';
```

CUSTNO	CUSTNAME	CITY	STATE

---------- ---------- ---------- ----------

3 ccc jaipur rajasthan

9)

SQL> select itemname,itemprice,qty from item where itemprice between 300 and 450;

no rows selected

10)

SQL> select custname,city,state from customer where city='amaravati' and state in ('maharashtra','telengana');

no rows selected

11)

SQL> select itemname,itemprice from item order by itemprice desc;

ITEMNO	ITEMNAME	ITEMPRICE	QTY	COLOUR	TOTAL
8	rice	450	100		45000
7	paneer	400	75		30000
1	coffee	200	20		4000
5	idli	110	50		5500
2	roti	100	30		3000
3	chapati	70	100		7000
6	vada	40	60		2400
4	tea	20	70		1400

8 rows selected.

12)

SQL> select custname,city,state from customer where city in ('pune','baroda','indore');

CUSTNAME CITY STATE

--- --- ---

bbb pune maharashtra

ddd indore madhya pradesh

ggg baroda gujarat

13)

SQL> select min(itemprice) as lowest_price from item;

MIN(ITEMPRICE)

20

14)

SQL> select itemname,itemprice from item where itemprice <150;

ITEMNO ITEMNAME PRICE QTY

--- --- --- ---

1 coffee 200 20

2 roti 100 30

3 chapati 70 100

4 tea 20 70

5 idli 110 50

6 vada 40 60

15)

SQL> create table maha_cust as select * from customer where state='maharashtra';

Table created.

SQL> select * from maha_cust;

CUSTNO	CUSTNAME	CITY	STATE
1	aaa	mumbai	maharashtra
2	bbb	pune	maharashtra

16)

SQL> create table gujarat_cust as select * from customer where state in ('madhya pradesh','guajrat');

Table created.

SQL> select * from gujarat_cust;

CUSTNO	CUSTNAME	CITY	STATE
6	fff	surat	gujarat
7	ggg	baroda	gujarat
4	ddd	indore	madhya pradesh
4	eee	bhopal	madhya Pradesh

17)

SQL> alter table gujarat_cust rename to madhya pradesh_cust;

Table altered.

SQL> select * from madhya pradesh_cust;

CUSTNO	CUSTNAME	CITY	STATE
5	eee	bhopal	madhya pradesh
7	ggg	baroda	gujarat

18)

SQL> select * from customer where state not in('gujarat','madhya pradesh');

CUSTNO	CUSTNAME	CITY	STATE
1	aaa	mumbai	maharshtra
2	bbb	pune	maharashtra
3	ccc	jaipur	rajasthan
8	hhh	hydrabad	telangana

6 rows selected.

19)

SQL> select custname,city,state from customer where state='karnataka';

no rows selected

20)

SQL> delete customer where city='mumbai';

1 row deleted.

Q.2)

create table worker(workerid number(10),first_name char(10),last_name char(10),salary number(10),joining_date char (10),department char(10));

Table created.

SQL> insert into worker values(&workerid,'&first_name','&last_name',&salary,'&joining_date','&department');

Enter value for workerid: 001

Enter value for first_name: monika

Enter value for last_name: aaher

Enter value for salary: 10000

Enter value for joining_date: 2014-02-20

Enter value for department: hr

old   1: insert into worker values(&workerid,'&first_name','&last_name',&salary,'&joining_date','&department')

new   1: insert into worker values(001,'monika','aaher',10000,'2014-02-20','hr')

1 row created.

SQL> /

Enter value for workerid: 002

Enter value for first_name: niharika

Enter value for last_name: vedpathak

Enter value for salary: 8000

Enter value for joining_date: 2014-06-11

Enter value for department: admin

old   1: insert into worker values(&workerid,'&first_name','&last_name',&salary,'&joining_date','&department')

new 1: insert into worker values(002,'niharika','vedpathak',8000,'2014-06-11','admin')

1 row created.

SQL> /

Enter value for workerid: 003

Enter value for first_name: vishal

Enter value for last_name: shinde

Enter value for salary: 30000

Enter value for joining_date: 2014-02-20

Enter value for department: hr

old 1: insert into worker
values(&workerid,'&first_name','&last_name',&salary,'&joining_date','&department')

new 1: insert into worker values(003,'vishal','shinde',30000,'2014-02-20','hr')

1 row created.

SQL> /

Enter value for workerid: 004

Enter value for first_name: amitabh

Enter value for last_name: surwase

Enter value for salary: 28000

Enter value for joining_date: 2014-02-20

Enter value for department: admin

old 1: insert into worker
values(&workerid,'&first_name','&last_name',&salary,'&joining_date','&department')

new 1: insert into worker values(004,'amitabh','surwase',28000,'2014-02-20','admin')

1 row created.

SQL> /

Enter value for workerid: 005

Enter value for first_name: vivek

Enter value for last_name: bhuse

Enter value for salary: 25000

Enter value for joining_date: 2014-06-11

Enter value for department: admin

old 1: insert into worker
values(&workerid,'&first_name','&last_name',&salary,'&joining_date','&department')

new 1: insert into worker values(005,'vivek','bhuse',25000,'2014-06-11','admin')

1 row created.

SQL> /

Enter value for workerid: 006

Enter value for first_name: vipul

Enter value for last_name: diwate

Enter value for salary: 20000

Enter value for joining_date: 2014-06-11

Enter value for department: account

old 1: insert into worker
values(&workerid,'&first_name','&last_name',&salary,'&joining_date','&department')

new 1: insert into worker values(006,'vipul','diwate',20000,'2014-01-20','account')

1 row created.

SQL> /

Enter value for workerid: 007

Enter value for first_name: satish

Enter value for last_name: kulkarni

Enter value for salary: 7500

Enter value for joining_date: 2014-01-20

Enter value for department: account

old 1: insert into worker
values(&workerid,'&first_name','&last_name',&salary,'&joining_date','&department')

new 1: insert into worker values(007,'satish','kulkarni',7500,'2014-01-20','account')

1 row created.

SQL> /

Enter value for workerid: 008

Enter value for first_name: geetika

Enter value for last_name: chavan

Enter value for salary: 9000

Enter value for joining_date: 2014-04-11

Enter value for department: admin

old 1: insert into worker
values(&workerid,'&first_name','&last_name',&salary,'&joining_date','&department')

new 1: insert into worker values(008,'geetika','chavan',9000,'2014-04-11','admin')

1 row created.

SQL> select * from worker;

WORKERID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DA	DEPARTMENT
1	monika	aaher	10000	2014-02-20	hr

2 niharika vedpathak 8000 2014-06-11 admin

3 vishal shinde 30000 2014-02-20 hr

4 amitabh surwase 28000 2014-02-20 admin

5 vivek bhuse 25000 2014-06-11 admin

6 vipul diwate 20000 2014-06-11 account

7 satish kulkarni 7500 2014-01-20 account

8 geetika chavan 9000 2014-04-11 admin

8 rows selected.

1)

SQL> select first_name as worker_name from worker;

WORKER_NAM

---

monika

niharika

vishal

amitabh

vivek

vipul

satish

geetika

8 rows selected.

2)

SQL> select upper(first_name) from worker;

UPPER(FIRS

MONIKA

NIHARIKA

VISHAL

AMITABH

VIVEK

VIPUL

SATISH

GEETIKA

8 rows selected.

3)

SQL> select department from worker group by department;

DEPARTMENT

---

hr

account

admin

4)

SQL> select substr(first_name,1,3) from worker;

SUB

---

mon

nih

vis

ami

viv

vip

sat

gee

8 rows selected.

5)

SQL> select instr(first_name,'A') from worker where worker_id=4;

INSTR(FIRST_NAME,'A')

0

6)

SQL> select rtrim(first_name) as"names" from worker;

names

---

monika

niharika

vishal

amitabh

vivek

vipul

satish

geetika

8 rows selected.

7)

SQL> select ltrim(department) as "depart" from worker;

depart

---

hr

admin

hr

admin

admin

account

account

admin

8 rows selected.

8)

SQL> select length(department) from worker group by department;

LENGTH(DEPARTMENT)

2

7

5

9)

SQL> select replace(first_name,'a','A') from worker ;

REPLACE(FI

---

monikA

nihArikA

vishAl

AmitAbh

vivek

vipul

satish

geetikA

8 rows selected.

10)

SQL> select concat(first_name,' ',last_name) as full_name from worker;

FULL_NAME

---

monika aaher

niharika vedpathak

vishal shinde

amitabh survase

vivek bhuse

vipul diwate

satish Kulkarni

geetika chavan

11)

SQL> select * from worker order by first_name asc;

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_D	DEPARTMENT
4	amitabh	survase	28000	20-FEB-14	admin
8	geetika	chavan	9000	11-APR-14	admin
1	monika	aaher	10000	20-FEB-14	hr
2	niharika	vedpathak	8000	11-JUN-14	admin
7	satish	kulkarni	7500	20-JAN-14	account
6	vipul	diwate	20000	11-JUN-14	account
3	vishal	shinde	30000	20-FEB-14	hr
5	vivek	bhuse	25000	11-JUN-14	admin

8 rows selected.

12)

SQL> select * from worker where first_name not in ('vipul','satish');

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_D	DEPARTMENT
1	monika	aaher	10000	20-FEB-14	hr
2	niharika	vedpathak	8000	11-JUN-14	admin

3 vishal shinde 30000 20-FEB-14 hr

4 amitabh survase 28000 20-FEB-14 admin

5 vivek bhuse 25000 11-JUN-14 admin

8 geetika chavan 9000 11-APR-14 admin

6 rows selected.

SQL> select * from worker where first_name not in ('vipul','satish');

WORKER_ID FIRST_NAME LAST_NAME SALARY JOINING_D DEPARTMENT

---------- ---------- ---------- ---------- --------- ----------

1 monika aaher 10000 20-FEB-14 hr

2 niharika vedpathak 8000 11-JUN-14 admin

3 vishal shinde 30000 20-FEB-14 hr

4 amitabh survase 28000 20-FEB-14 admin

5 vivek bhuse 25000 11-JUN-14 admin

8 geetika chavan 9000 11-APR-14 admin

6 rows selected.

13)

SQL> select * from worker where first_name like '%a%';

WORKER_ID FIRST_NAME LAST_NAME SALARY JOINING_D DEPARTMENT

---------- ---------- ---------- ---------- --------- ----------

1 monika aaher 10000 20-FEB-14 hr

2 niharika vedpathak 8000 11-JUN-14 admin

3 vishal shinde 30000 20-FEB-14 hr

4 amitabh survase 28000 20-FEB-14 admin

7 satish kulkarni 7500 20-JAN-14 account

8 geetika chavan 9000 11-APR-14 admin

6 rows selected.

14)

SQL> select * from worker where first_name like '_____h';

WORKER_ID FIRST_NAME LAST_NAME SALARY JOINING_D DEPARTMENT

---------- ---------- ---------- ---------- --------- ----------

7 satish kulkarni 7500 20-JAN-14 account

15)

SQL> select * from emp10 where joining_date='20-feb-14';

WORKER_ID FIRST_NAME LAST_NAME SALARY JOINING_D DEPARTMENT

---------- ---------- ---------- ---------- --------- ----------

1 monika aaher 10000 20-FEB-14 hr

3 vishal shinde 30000 20-FEB-14 hr

4 amitabh survase 28000 20-FEB-14 admin

16)

SQL> alter table worker drop column joining_date;

Table altered.

SQL> select * from worker;

WORKER_ID FIRST_NAME LAST_NAME SALARY DEPARTMENT

---------- ---------- ---------- ---------- ----------

1 monika aaher 10000 hr

2 niharika vedpathak 8000 admin

3 vishal shinde 30000 hr

4 amitabh survase 28000 admin

5 vivek bhuse 25000 admin

6 vipul diwate 20000 account

7 satish kulkarni 7500 account

8 geetika chavan 9000 admin

8 rows selected.

17)

SQL> select count (worker_id) from worker where department ='admin';

COUNT(WORKER_ID)

4

18)

SQL> select first_name from worker where salary>=5000 and salary<=20000;

FIRST_NAME

---

monika

niharika

vipul

satish

geetika

19)

SQL> select department,count(department) from worker group by department;

DEPARTMENT COUNT(DEPARTMENT)

---------- ----------

hr 2

account 2

admin 4

20)

SQL> select * from worker where worker_id in (1,3,5,7);

WORKER_ID FIRST_NAME LAST_NAME SALARY DEPARTMENT

---------- ---------- ---------- ---------- ----------

1 monika aaher 10000 hr

3 vishal shinde 30000 hr

5 vivek bhuse 25000 admin

7 satish kulkarni 7500 account

21)

SQL> select * from worker where worker_id not in (1,3,5,7);

WORKER_ID FIRST_NAME LAST_NAME SALARY DEPARTMENT

---------- ---------- ---------- ---------- ----------

2 niharika vedpathak 8000 admin

4 amitabh survase 28000 admin

6 vipul diwate 20000 account

8 geetika chavan 9000 admin

22)

SQL> create table emp as select * from worker ;

Table created.

SQL> select * from emp;

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	DEPARTMENT
1	monika	aaher	10000	hr
2	niharika	vedpathak	8000	admin
3	vishal	shinde	30000	hr
4	amitabh	survase	28000	admin
5	vivek	bhuse	25000	admin
6	vipul	diwate	20000	account
7	satish	kulkarni	7500	account
8	geetika	chavan	9000	admin

8 rows selected.

23)

SQL> select current_timestamp from dual;

CURRENT_TIMESTAMP

05-SEP-24 09.01.29.094000 AM +05:30

24)

SQL> select max(salary)from worker;

MAX(SALARY)

30000

25)

SQL> select department,count(department) as worker_count from worker group by having count(department)<5;

DEPARTMENT WORKER_COUNT

---------- ------------

hr 2

account 2

admin 4

26)

SQL> update worker set salary=salary+1500;

8 rows updated.

SQL> select * from worker ;

WORKER_ID FIRST_NAME LAST_NAME SALARY DEPARTMENT

---------- ---------- ---------- ---------- ----------

1 monika aaher 11500 hr

2 niharika vedpathak 9500 admin

3 vishal shinde 31500 hr

4 amitabh survase 29500 admin

5 vivek bhuse 26500 admin

6 vipul diwate 21500 account

7 satish kulkarni 9000 account

8 geetika chavan 10500 admin

8 rows selected.

27)

SQL> select department ,avg(salary)from worker group by department;

DEPARTMENT AVG(SALARY)

---------- -----------

hr 21500

account 15250

admin 19000

28)

SQL> select first_name,salary from worker where salary>(select avg(salary) from worker;

FIRST_NAME SALARY

---------- ------

vishal 31500

amitabh 29500

vivek 26500

Vipul 21500

29)

```
SQL> select department ,sum(salary) from worker group by department;


DEPARTMENT SUM(SALARY)
---------- -----------
hr              43000
account         30500
admin           80000
```

30)

```
SQL> update worker set salary=salary+1000 where department='admin';


4 rows updated.


SQL> select * from worker where department='admin';


 WORKER_ID FIRST_NAME LAST_NAME      SALARY DEPARTMENT
---------- ---------- ---------- ---------- ----------
         2 niharika   vedpathak       10500 admin
         4 amitabh    survase         30500 admin
         5 vivek      bhuse           27500 admin
         8 geetika    chavan          11500 admin


4 rows selected.
```