```
CREATE TABLE employee_details(
        employee_id NUMBER(10),
        first name VARCHAR2(20),
        last name VARCHAR2(20),
        age NUMBER(3),
        gender VARCHAR2(6),
        salary NUMBER(10,2),
        date_of_birth DATE
);
INSERT INTO employee details
values(1, 'Pratik', 'Mishra', 22, 'Male', 200, '06-JUL-20');
INSERT INTO employee details
values(2,'Vineet','Gauda',23,'Male',400,'06-MAR-20');
INSERT INTO employee details
values(3, 'Gagan', 'Kaur', 21, 'Female', 100, '17-MAR-20');
INSERT INTO employee_details
values(4, 'Anjali', 'Pandey', 22, 'Female', 200, '15-JUL-20');
INSERT INTO employee_details
values(5, 'Janhavi', 'More', 25, 'Female', 1000, '12-DEC-20');
SELECT * FROM employee details;
ALTER TABLE employee details DROP COLUMN age;
DESC employee details;
SELECT * FROM employee_details;
ALTER TABLE employee details ADD(age NUMBER(3));
SELECT * FROM employee_details;
ALTER TABLE employee_details MODIFY (age NUmber(2));
SELECT * FROM employee details;
DROP TABLE employee details;
SELECT * FROM employee_details;
CREATE TABLE employee_details(
        employee_id NUMBER(10),
        first_name VARCHAR2(20),
        last name VARCHAR2(20),
        age NUMBER(3),
        gender VARCHAR2(6),
        salary NUMBER(10,2),
        date of birth DATE,
        CONSTRAINT employee_id_pk PRIMARY KEY(employee_id)
);
INSERT INTO employee_details
values(1, 'Pratik', 'Mishra', 22, 'Male', 200, '06-JUL-20');
INSERT INTO employee details
values(null, 'Vineet', 'Gauda', 23, 'Male', 400, '06-MAR-20');
DROP TABLE employee details;
SELECT * FROM USER CONSTRAINTS;
DROP TABLE employee_details;
DROP TABLE project_details;
CREATE TABLE project details(
        project id NUMBER(10),
        title VARCHAR2(50),
        cost NUMBER(10,2),
        client_name VARCHAR2(50),
```

```
CONSTRAINT project_id_pk PRIMARY KEY(project_id)
);
CREATE TABLE employee details(
        employee id NUMBER(10),
        first_name VARCHAR2(20) NOT NULL,
        last name VARCHAR2(20) NOT NULL,
        age NUMBER(3) NOT NULL,
        gender VARCHAR2(6) NOT NULL,
        salary NUMBER(10,2)NOT NULL,
        date of birth DATE NOT NULL,
        project id NUMBER(10) NOT NULL,
        email VARCHAR(50) NOT NULL,
        city VARCHAR2(20) default 'Mumbai',
        CONSTRAINT employee id pk PRIMARY KEY(employee id),
        CONSTRAINT project_id_fk FOREIGN KEY(project_id) REFERENCES
project_details(project_id),
        CONSTRAINT age ck CHECK(AGE>=18),
        CONSTRAINT email_uq UNIQUE(email)
);
INSERT INTO PROJECT_DETAILS VALUES(1, 'GPAY', 1000, 'GOOGLE');
INSERT INTO PROJECT DETAILS VALUES(2, 'PHONEPAY', 5000, 'PHONE PAY TECH');
SELECT * FROM PROJECT details;
INSERT INTO employee details
values(1, 'Pratik', 'Mishra', 22, 'Male', 200, '06-JUL-20', 1, 'pratik3690mishra');
INSERT INTO employee_details
values(2,'Vineet','Gauda',23,'Male',400,'06-MAR-20',2,'vineetmindgate');
INSERT INTO employee_details values(7,'VF','VFV',41,'NHN',500,'17-APR-20',2);
INSERT INTO employee details
values(4, 'Anjali', 'Pandey', 22, 'Female', 200, '15-JUL-20', 2);
INSERT INTO employee details
values(5, 'Janhavi', 'More', 25, 'Female', 1000, '12-DEC-20', 2);
SELECT * FROM employee details;
DROP TABLE employee details;
DROP TABLE project details;
INSERT INTO
employee_details(employee_id,first_name,last_name,age,gender,salary,date_of_birt
h, project id, email)
VALUES(101, 'sAMARTH', 'Patil',25, 'Male',1000, '10-Jan-2000',1, 'samarth@gmail.com')
select * from employee_details;
--Client master---
CREATE TABLE Client master (
    client no VARCHAR2(6),
    name VARCHAR2(20) NOT NULL,
    address1 VARCHAR2(30),
    address2 VARCHAR2(30),
    city VARCHAR2(15),
    state VARCHAR2(15),
    pincode NUMBER(6),
    bal due NUMBER(10,2),
    CONSTRAINT client_no_pk PRIMARY KEY(client_no),
```

```
CONSTRAINT client_no_ck CHECK(client_no LIKE 'C%')
);
INSERT INTO client master
(client no,name,address1,address2,city,state,pincode,bal due)
                   VALUES('C00001','Ivan
Bayross', 'Bhandup', 'Bombay', 'MAHARASHTRA', 400054, 15000 );
INSERT INTO client_master
(client_no, name, address1, address2, city, state, pincode, bal_due)
                   VALUES('C00002','Vandana
Saitwal', 'Madras', 'Madras', 'Madras', 'MAHARASHTRA', 400054, 15000 );
INSERT INTO client master
(client no,name,address1,address2,city,state,pincode,bal due)
                   VALUES('C00003','Pramada
Jaguste','Dadar','Bombay','Bombay','MAHARASHTRA',400054, 15000 );
INSERT INTO client_master
(client_no,name,address1,address2,city,state,pincode,bal_due)
                   VALUES('C00004','Basu
Navindgi','Thane','Bombay','Bombay','MAHARASHTRA',400054, 15000 );
INSERT INTO client master
(client_no,name,address1,address2,city,state,pincode,bal_due)
                    VALUES('C00005', 'Ravi Sreedharan', 'chandini chowk', 'purani
delhi', 'Delhi', 'Delhi', 100001, 2000)
INSERT INTO client_master
(client_no,name,address1,address2,city,state,pincode,bal_due)
VALUES('C00005', 'Rukmini', 'Kalyan', 'Bombay', 'Bombay', 'MAHARASHTRA', 400054, 15000
);
--product master---
CREATE TABLE product_master (
    product_no VARCHAR2(6) ,
    description VARCHAR2(50) NOT NULL,
    profit_percent NUMBER(3,2) NOT NULL,
    unit measure VARCHAR2(10) NOT NULL,
    record lvl NUMBER(8) NOT NULL,
    sell_price NUMBER(8,2) NOT NULL,
    cost_price NUMBER(8,2) NOT NULL,
    CONSTRAINT product no pk PRIMARY KEY(product no),
    CONSTRAINT product_no_ck CHECK(product_no LIKE 'P%'),
    CONSTRAINT sell_price_ck CHECK(sell_price> 0),
     CONSTRAINT cost_price_ck CHECK(cost_price > 0)
);
INSERT INTO
product master(product no, description, profit percent, unit measure, record lvl, sel
l_price,cost_price)
                    VALUES('P00001','1.44 Flopppies',5,'Piece',100,525,500);
INSERT INTO
product_master(product_no,description,profit_percent,unit_measure,record_lvl,sel
l price,cost price)
                    VALUES('P03453','Monitors',5,'Piece',5,1050,1000);
INSERT INTO
product_master(product_no,description,profit_percent,unit_measure,record_lvl,sel
l_price, cost_price)
```

```
VALUES('P06734','Mouse',6,'Piece',10,12000,11280);
INSERT INTO
product_master(product_no,description,profit_percent,unit_measure,record_lvl,sel
l price,cost price)
                    VALUES('P07865','1.22 Flopppies',5,'Piece',100,525,500);
INSERT INTO
product_master(product_no,description,profit_percent,unit_measure,record_lvl,sel
l_price, cost_price)
                    VALUES('P07868','Keyboards',2,'Piece',10,3150,3050);
INSERT INTO
product_master(product_no,description,profit_percent,unit_measure,record_lvl,sel
l price,cost price)
                    VALUES('P07885','CD Drive',2.5,'Piece',10,5250,5100);
INSERT INTO
product_master(product_no,description,profit_percent,unit_measure,record_lvl,sel
l_price,cost_price)
                    VALUES('P07965','540 HDD',4,'Piece',10,8400,8000);
INSERT INTO
product_master(product_no,description,profit_percent,unit_measure,record_lvl,sel
l_price,cost_price)
                    VALUES('P07975','1.44 Drive',5,'Piece',10,1050,1000);
                    INSERT INTO
product_master(product_no,description,profit_percent,unit_measure,record_lvl,sel
l_price,cost_price)
                    VALUES('P08865','1.22 Drive',5,'Piece',2,1050,1000);
--SALESMAN MASTER--
CREATE TABLE salesman_master (
salesman no VARCHAR2(6),
salesman_name VARCHAR2(20) NOT NULL,
Address1 VARCHAR2(30),
Address2 VARCHAR2(30),
city VARCHAR2(20),
pincode VARCHAR2(6),
state VARCHAR2(20),
sal_amt NUMBER(8,2) NOT NULL,
tgt to get NUMBER(6,2) NOT NULL,
ytd_sales NUMBER(6,2) NOT NULL,
remarks VARCHAR2(60),
CONSTRAINT salesman_no_pk PRIMARY KEY(salesman_no),
CONSTRAINT salesman no ck CHECK(salesman no LIKE 'S%'),
CONSTRAINT sal amt ck CHECK(sal amt > 0),
CONSTRAINT tgt to get ck CHECK(tgt to get > 0)
);
INSERT INTO salesman master
VALUES('S00001', 'Kiran', 'A/14', 'Worli', 'Bombay', '400002', 'MAH', 3000, 100, 50, 'Good
');
        INSERT INTO salesman master
VALUES('S00002', 'Manish', '65', 'Nariman', 'Bombay', '400001', 'MAH', 3000, 200, 100, 'Go
od');
        INSERT INTO salesman master
VALUES('S00003', 'Ravi', 'P-7', 'Bandra', 'Bombay', '400032', 'MAH', 3000, 200, 100, 'Good
```

```
');
        INSERT INTO salesman master
VALUES('S00004','Ashish','A/5','Juhu','Bombay','400044','MAH',3500,200,150,'Good
');
--SALES ORDER--
CREATE TABLE sales_order(
 s_order_no VARCHAR2(6),
    s order date date,
    client no VARCHAR2(6),
    dely addr VARCHAR2(25),
    salesman no VARCHAR2(6),
    dely type CHAR(1) DEFAULT 'F',
    billed_yn CHAR(1)DEFAULT 'N',
    dely_date date,
    order status VARCHAR2(10),
    CONSTRAINT s_order_no_pk PRIMARY KEY(s_order_no),
    CONSTRAINT s_order_no_ck CHECK(s_order_no LIKE '0%'),
    CONSTRAINT client_no_fk FOREIGN KEY(client_no) REFERENCES
Client master(client no),
    CONSTRAINT salesman no fk FOREIGN KEY(salesman no) REFERENCES
salesman master(salesman no),
    CONSTRAINT dely_type CHECK(dely_type IN('P','F')),
    CONSTRAINT billed_yn CHECK(billed_yn IN('Y','N')),
    CONSTRAINT dely_date_ck CHECK(dely_date > s_order_date),
    CONSTRAINT order status ck CHECK(order status IN('IN PROCESS', 'BACK
ORDER', 'CANCELLED'))
);
INSERT INTO
sales_order(s_order_no,s_order_date,client_no,salesman_no,dely_type,billed_yn,de
ly_date,order_status)
VALUES('019001','12-Jan-1996','C00001','S00001','F','N','20-Jan-1996','In
Process');
INSERT INTO
sales_order(s_order_no,s_order_date,client_no,salesman_no,dely_type,billed_yn,de
ly date, order status)
VALUES('019002','25-Jan-1996','C00002','S00002','P','N','27-Jan-1996','Cancelled
');
INSERT INTO
sales order(s order no,s order date, client no, sales man no, dely type, billed yn, de
ly date, order status)
VALUES('019001','12-Jan-1996','C00001','S00001','F','N','20-Jan-1996','In
Process');
INSERT INTO
sales order(s order no,s order date, client no, sales man no, dely type, billed yn, de
ly_date,order_status)
VALUES('019002','25-Jan-1996','C00002','S00002','P','N','27-Jan-1996','Cancelled
```

```
');
INSERT INTO
sales_order(s_order_no,s_order_date,client_no,salesman_no,dely_type,billed_yn,de
ly_date,order_status)
VALUES('046865','18-Feb-1996','C00003','S00003','F','Y','20-Feb-1996','Fulfilled
');
INSERT INTO
sales_order(s_order_no,s_order_date,client_no,salesman_no,dely_type,billed_yn,de
ly date, order status)
VALUES('019003','03-Apr-1996','C00001','S00001','F','Y','07-Apr-1996','FulFilled
');
INSERT INTO
sales_order(s_order_no,s_order_date,client_no,salesman_no,dely_type,billed_yn,de
ly_date, order_status)
VALUES('046866','20-May-1996','C00004','S00002','P','Y','22-May-1996','Cancelled
');
INSERT INTO
sales_order(s_order_no,s_order_date,client_no,salesman_no,dely_type,billed_yn,de
ly date, order status)
VALUES('010008','24-May-1996','C00005','S00004','F','N','26-May-1996','In
Process');
  ______
--SALES ORDER DETAILS--
CREATE TABLE sales order details(
s_order_no VARCHAR2(6),
product no VARCHAR2(6),
oty_ordered NUMBER(8),
qty disp NUMBER(8),
product_rate NUMBER(10,2),
    CONSTRAINT s_order_no_fk FOREIGN KEY(s_order_no) REFERENCES
sales order(s order no),
    CONSTRAINT product_no_fk FOREIGN KEY(product_no) REFERENCES
product master(product no)
);
--CHALLAN HEADER--
CREATE TABLE challan header(
   challan no VARCHAR2(6),
   s order_no VARCHAR2(6),
   challan_date DATE NOT NULL,
   billed_yn CHAR(1) DEFAULT 'N' ,
     CONSTRAINT challan_no_pk_ PRIMARY KEY( challan_no),
     CONSTRAINT challan_no_ck_ CHECK ( challan_no LIKE 'CH%'),
    CONSTRAINT s_order_no_fk_ FOREIGN KEY(s_order_no) REFERENCES sales_order(
s_order_no),
   CONSTRAINT billed_yn_ck_ CHECK (billed_yn ='Y' OR billed_yn ='N')
```

```
);
 --CHALLAN_DETAILS--
 CREATE TABLE challan details(
        challan no VARCHAR2(6),
        product no VARCHAR2(6),
        qty_disp NUMBER(4,2) NOT NULL,
    CONSTRAINT challan_no_pkey PRIMARY KEY(challan_no),
    CONSTRAINT challan no fkey FOREIGN KEY(challan no) REFERENCES
challan header(challan no),
    CONSTRAINT product no fkey FOREIGN KEY(product no) REFERENCES
product master(product no)
    );
    commit;
    CREATE TABLE employee_details (
                 employee id NUMBER(10),
                 first name VARCHAR2(50) NOT NULL,
                 last name VARCHAR2(50) NOT NULL,
                 age NUMBER(3) NOT NULL,
                gender VARCHAR(6) NOT NULL,
                qualification VARCHAR(50) not null,
                city VARCHAR(50) NOT NULL,
                date_OF_birth DATE NOT NULL,
                 salary NUMBER(10,2),
                CONSTRAINT employee id pk PRIMARY KEY(employee id)
    );
INSERT INTO employee_details values
(3681, 'Ashish', 'Kamble', 32, 'Male', 'M. Tech', 'Nagpur', '13-Jun-1990', 25000);
INSERT INTO employee_details values (3680, 'Anjali', 'Pandey', 22, 'Female',
'B.Tech', 'Kalyan', '16-SEP-2000', 25000);
INSERT INTO employee_details values (3683,'Gagandeep
Kaur', 'Jandu',21, 'Female', 'B.E.', 'Kalyan', '17-MAR-2001',30000);
INSERT INTO employee details values
(3690, 'Pratik', 'Mishra', 22, 'Male', 'B.E.', 'Pune', '06-JUL-2000', 25000);
INSERT INTO employee details values
(3689, 'Pratik', 'Ghadge', 23, 'Male', 'B.E.', 'Mumbai', '16-OCT-98', 1000);
INSERT INTO employee_details VALUES (3706, 'Vineet', 'Gauda', 22, 'Male', 'B.E.'
,'Mumbai','19-SEP-1999',25000);
INSERT INTO employee_details values
(3701, 'Rohit', 'Dagade', 21, 'Male', 'B.E.', 'Mumbai', '25-APR-2001', 30000);
INSERT INTO employee details VALUES
(3705,'Yash','Walanju',21,'Male','B.Tech','Alibag','09-APR-2001',25000);
INSERT INTO employee details VALUES
(3703, 'Janhavi', 'More', 22, 'Female', 'B.E.', 'Thane', '28-APR-2000', 25000);
INSERT into employee_details values
(3679, 'Gaurav', 'Baswant', 25, 'Male', 'B.E.', 'Mumbai', '15-Jun-1998', 25000);
INSERT INTO employee details values (3682, 'Dinesh', 'Rajan', 22, 'Male', 'B
E.','Mumbai','13-Nov-2000',25000);
INSERT INTO employee details values
(3699, 'Vipul', 'Tambavekar', 23, 'Male', 'M. Tech', 'Satara', '06-March-1997', 26000);
INSERT INTO employee_details values
```

```
(3700, 'Pradeep', 'sawant', 24, 'Male', 'B.E.', 'Pune', '12-DEC-1997', 25000);
INSERT INTO employee_details values (3702, 'Siddhesh', 'Kumbhar', 23, 'Male', 'B.
Tech', 'Satara', '10-Jun-1999', 25000);
INSERT INTO employee details values
(3685, 'Kapil', 'Khandpekar', 26, 'Male', 'B.E.', 'Mumbai', '03-May-1995', 25300);
INSERT INTO employee_details values (3693,
'Sayali', 'Shete', 22, 'Female', 'B.E.', 'Mumbai', '20-NOV-1999', 25000);
INSERT INTO employee_details values (3707, 'Suraj', 'Gupta', 23, 'Male', 'B.Tech'
,'Vasai','20-jan-1999',25000);
INSERT INTO employee details values
(3698, 'Suraj', 'Patel', 24, 'Male', 'B.E.', 'Mumbai', '13-Jun-1998', 25000);
INSERT INTO employee details values
(3688, 'Prashant', 'Zunzarrao',24, 'Male', 'B.E.', 'Kalyan', '23-Dec-1997',25000);
INSERT INTO employee details values
(3695, 'Siraj', 'Shaikh', 24, 'Male', 'B.E.', 'Mumbai', '01-jan-1998', 25000);
INSERT INTO employee details values
(3704, 'Amit', 'Wagharalkar', 24, 'Male', 'B.E.', 'Mumbai', '11-july-1998', 25000);
INSERT INTO employee_details values
(3692, 'Rohit', 'Pandey', 28, 'Male', 'B.E.', 'Mumbai', '01-JAN-1994', 25797);
INSERT INTO employee details values
(3678, 'ajay', 'benbansi',25, 'Male', 'B.E.', 'Mumbai', '22-oct-1997',25000);
INSERT INTO employee_details values
(3614, 'Rishab', 'Gharti', 23, 'Male', 'B. Tech', 'Mumbai', '14-DEC-1998', 25000);
INSERT INTO employee details values
(3691, 'Kunal', 'Aakre', 24, 'Male', 'B. Tech', 'Nasik', '06-Mar-1998', 25000);
INSERT INTO employee_details values (3694, 'SHABAN Ali', 'KHAN', 23, 'Male', 'B.E.
MECH', 'Mumbai', '06-JAN-1998', 800);
INSERT INTO employee details values
(3696, 'Shakti', 'Patole', 22, 'Male', 'B.E', 'BADLAPUR', '24-MAR-2000', 25000);
INSERT INTO employee_details values (3697, 'Siddhesh', 'Patangrao', 26, 'Male',
'B.E.', 'Ambivli', '22-Apr-1996', 2500);
INSERT into employee_details values
(3655, 'Amol', 'Pawar', 24, 'Male', 'B.E.', 'Kolhapur', '21-Oct-1998', 26000);
INSERT into employee details
values(3686, 'Kavita', 'Khajure', 23, 'Female', 'B. Tech', 'Thane', '25-Aug-1999', 25000)
select * from employee_details;
--all records--
select * from employee details;
--to select specific COLUMNS(SELECTED COLUMNS)--
SELECT employee_id,first_name,last_name,salary FROM employee_details;
select * from employee_details where city = 'Kalyan';
select * from employee details where qualification = 'B.E.' AND city = 'Kalyan';
select * from employee details where city != 'Mumbai';
select * from employee details where city NOT IN('Mumbai', 'Pune');
select * from employee_details where city IN('Mumbai', 'Pune');
SELECT * from employee_details where salary BETWEEN 25000 AND 30000;
SELECT * from employee_details where salary NOT BETWEEN 25000 AND 30000;
SELECT * from employee_details where first_name LIKE 'A%';
SELECT * from employee details where last name LIKE '%ar';
SELECT * from employee details ORDER BY first name;
SELECT * from employee details ORDER BY first name DESC;
SELECT first_name , last_name , city FROM employee_details ORDER BY first_name
ASC;
```

```
SELECT first_name , last_name , city FROM employee_details ORDER BY city ,
first_name;
---aggregate functions--
SELECT AVG(salary) from employee_details;
SELECT MAX(salary) from employee_details;
SELECT MIN(salary) from employee_details;
SELECT COUNT(city) from employee_details where city = 'Mumbai';
SELECT city , count(city) FROM employee details group by city order by city;
SELECT city , count(city) FROM employee_details group by city order by
count(city);
SELECT city , SUM(salary) FROM employee_details GROUP BY city HAVING SUM(salary)
<= 80000 ORDER BY city;
SELECT city , SUM(salary) FROM employee_details GROUP BY city HAVING SUM(salary)
>= 80000 ORDER BY city;
CREATE TABLE color_a (
            color_id NUMBER(10),
            name VARCHAR(30)
);
INSERT INTO color_a VALUES(1, 'Blue');
INSERT INTO color_a VALUES(2, 'Green');
INSERT INTO color a VALUES(3, 'Yellow');
CREATE TABLE color_b (
            color id NUMBER(10),
            name VARCHAR(50)
);
INSERT INTO color b VALUES(1, 'Blue');
INSERT INTO color b VALUES(2, 'Green');
INSERT INTO color b VALUES(4, 'Gold');
select * from color_a;
select * from color b;
select * from color_a CROSS JOIN color_b;
--joins--
--inner join--
select * from color a a JOIN color b b ON a.color id = b.color id;
select * from color_a a INNER JOIN color_b b ON a.color_id = b.color_id;
--Outer Join --
--left outer join--
select * from color_a a LEFT JOIN color_b b ON a.color_id = b.color_id;
--right outer join--
select * from color_a a RIGHT JOIN color_b b ON a.color_id = b.color_id;
--full outer join--
select * from color_a a FULL OUTER JOIN color_b b ON a.color_id = b.color_id;
--Self Join--
CREATE TABLE employee manager details (
            employee id NUMBER(10),
            name VARCHAR2(20),
            designation VARCHAR2(20),
            reports_to NUMBER(10)
);
INSERT INTO employee_manager_details VALUES(101,'x','Director',null);
INSERT INTO employee_manager_details VALUES(102,'y','Manager',101);
INSERT INTO employee_manager_details VALUES(103,'z','Jr Manager',102);
INSERT INTO employee_manager_details VALUES(104, 'a', 'Trainee', 103);
```

```
INSERT INTO employee_manager_details VALUES(105,'b','Trainee',103);
select * from employee_manager_details;
SELECT * FROM employee manager details emp CROSS JOIN employee manager details
mgr;
SELECT emp.name , 'reports to' , mgr.name FROM employee_manager_details emp JOIN
employee manager_details mgr ON emp.reports_to = mgr.employee_id;
CREATE TABLE employee_details(
    employee id VARCHAR2(10),
    first name VARCHAR2(20),
    last name VARCHAR2(20),
    age NUMBER(3),
    gender VARCHAR2(6),
    salary NUMBER(10,2),
    date_of_birth DATE,
        project id NUMBER(10),
     email VARCHAR(50) NOT NULL,
     city VARCHAR2(20) DEFAULT 'Mumbai',
        CONSTRAINT employee_id_pk PRIMARY KEY(employee_id),
        CONSTRAINT project id fk FOREIGN KEY(project id) REFERENCES
project details(project id),
    CONSTRAINT age_ck CHECK(age >= 18),
    CONSTRAINT email_uq UNIQUE(email)
);
INSERT INTO
employee details(employee id, first name, last name, age, gender, salary, date of birt
h,project id,email)
VALUES('MGS'||employee_sequence.nextVal,'Gagandeep
kaur','Jandu',21,'Female',20000,'17-MAR-01',1,'gagan123@gmail.com');
INSERT INTO
employee details(employee id, first name, last name, age, gender, salary, date of birt
h,project id,email)
VALUES('MGS'||employee sequence.nextVal,'Anjali','Pandey',22,'Female',25000,'27-
JAN-01',2,'abc123@gmail.com');
INSERT INTO
employee_details(employee_id,first_name,last_name,age,gender,salary,date_of_birt
h,project id,email)
VALUES('MGS'||employee_sequence.nextVal,'Sejal','Jain',21,'male',30000,'16-SEP-0
1',1,'abcd123@gmail.com');
CREATE TABLE project_details(
             project id NUMBER(10),
             title VARCHAR2(50),
             cost NUMBER(10,2),
             client name VARCHAR2(50),
             CONSTRAINT project_id_pk PRIMARY KEY(project_id)
             );
INSERT INTO project_details VALUES(1, 'Gpay', 10000, 'Google');
INSERT INTO project details VALUES(2, 'PhonePay', 5000, 'Phone Pay Tech');
select * from project details;
DROP TABLE employee details;
DROP TABLE project details;
select * from employee_details;
```

```
SELECT * FROM project_details project JOIN employee_details employee ON
project.project id = empoyee.project id AND project.title ='Gpay';
SELECT * FROM employee details WHERE project id = (
                SELECT project id from project details WHERE title = 'Gpay'
);
SELECT * FROM employee_details WHERE NOT EXISTS (SELECT project_id FROM
project_details WHERE title = 'BHIM');
CREATE SEQUENCE employee_sequence;
SELECT employee sequence.nextVal FROM dual;
SELECT employee sequence.currVal FROM dual;
select * from employee details;
DROP SEQUENCE employee sequence;
CREATE SEQUENCE employee sequence
START WITH 10000
INCREMENT BY 10;
INSERT INTO
employee_details(employee_id,first_name,last_name,age,gender,salary,date_of_birt
h,project id,email)
VALUES('MGS'||employee_sequence.nextVal,'Gagandeep
kaur','Jandu',21,'Female',20000,'17-MAR-01',1,'gagan123@gmail.com');
INSERT INTO
employee_details(employee_id,first_name,last_name,age,gender,salary,date_of_birt
h, project id, email)
VALUES('MGS'||employee_sequence.nextVal,'Anjali','Pandey',22,'Female',25000,'27-
JAN-01',2,'abc123@gmail.com');
INSERT INTO
employee_details(employee_id,first_name,last_name,age,gender,salary,date_of_birt
h,project id,email)
VALUES('MGS'||employee_sequence.nextVal,'Sejal','Jain',21,'male',30000,'16-SEP-0
1',1,'abcd123@gmail.com');
SELECT * FROM employee_details;
--STRING FUNCTIONS--
SELECT ASCII('a') from dual;
SELECT ASCII('A') from dual;
SELECT CHR(65) from dual;
SELECT CHR(97) from dual;
SELECT CONCAT('Happy','Coding') FROM dual;
SELECT 'Happy' || '' || 'Coding' FROM dual;
SELECT INITCAP('HAPPY CODING') FROM dual;
SELECT LENGTH('MINDGATE SOLUTIONS') FROM dual;
SELECT first_name FROM employee_details ORDER BY LENGTH(first_name) DESC;
SELECT SYSDATE from dual;
SELECT ADD_MONTHS(SYSDATE,2) from dual;
SELECT ADD_MONTHS(SYSDATE,-2) from dual;
SELECT SYSDATE +1 FROM dual;
SELECT SYSDATE -2 from DUAL;
SELECT EXTRACT(DAY FROM SYSDATE) FROM DUAL;
```

```
SELECT EXTRACT(DAY FROM TO_DATE('13-DEC-2022','DD-MON-YYYY')) FROM DUAL;
SELECT EXTRACT(MONTH FROM SYSDATE) FROM DUAL;
SELECT EXTRACT(MONTH FROM TO DATE('13-DEC-2022', 'DD-MON-YYYY')) FROM DUAL;
--VIEW--
SELECT * FROM employee_details;
CREATE VIEW employee_vw
AS
    SELECT
            employee id,
            first_name,
            last name,
            gender
    FROM
            employee details;
    select * from employee_vw;
    SELECT * FROM employee vw
    WHERE last_name ='Pandey';
UPDATE employee vw SET first name = 'Manish' WHERE employee id = 3689;
select * from employee_details;
select employee_id from employee_vw;
--index--
CREATE INDEX employee_first_name
ON employee details(first name);
select * from all_indexes where table_name ='EMPLOYEE_DETAILS';
--STORED PROCEDURE --
DROP TABLE employee_details;
CREATE TABLE employee_details(
        employee_id NUMBER(10),
        name VARCHAR2(20) not null,
        salary NUMBER(10) NOT NULL,
        CONSTRAINT employee_id_pk PRIMARY KEY(employee_id)
);
CREATE OR REPLACE PROCEDURE insert new employee(
        p_employee_id IN NUMBER,
        p_name IN VARCHAR2,
        p_salary IN NUMBER
)
IS
BEGIN
        INSERT INTO employee details
        VALUES(p_employee_id , p_name , p_salary);
        COMMIT;
END;
BEGIN
        insert_new_employee(101,'x',100);
END;
/
```

```
select * from employee_details;
commit;
```