**Q.7. Create supertype person\_typ with attributes id, name, phone\_no and member function show that returns id and name of the person. Create table person of person\_typ and insert records into it and display id and name of person using show function. Create subtype student\_type of spertype person\_typ  with attributes dept\_id and major. It has member function show that overrides member function of person\_typ and returns the major of student. Create table student of student\_type and insert record into it and display major of the student using show function.**

**SQL Query:**

CREATE OR REPLACE TYPE person\_typ AS OBJECT (

id INT,

name VARCHAR(50),

phone\_no VARCHAR(15),

MEMBER FUNCTION show RETURN VARCHAR2

);

CREATE TABLE person OF person\_typ;

-- Insert records into the person table

INSERT INTO person VALUES (person\_typ(1, 'John Doe', '555-123-4567'));

INSERT INTO person VALUES (person\_typ(2, 'Jane Smith', '555-987-6543'));

-- Add more records as needed

-- Define the member function 'show' for 'person\_typ'

CREATE OR REPLACE TYPE BODY person\_typ AS

MEMBER FUNCTION show RETURN VARCHAR2 IS

BEGIN

RETURN TO\_CHAR(self.id) || ' - ' || self.name;

END;

END;

CREATE OR REPLACE TYPE student AS OBJECT (

person\_data person\_typ,

dept\_id INT,

major VARCHAR(50),

MEMBER FUNCTION show RETURN VARCHAR2

);

CREATE TABLE studentinfo OF student;

-- Insert records into the student table

INSERT INTO studentinfo VALUES (student(person\_typ(3, 'Alice Johnson', '555-111-2222'), 101, 'Computer Science'));

INSERT INTO studentinfo VALUES (student(person\_typ(4, 'Bob Williams', '555-333-4444'), 102, 'Engineering'));

-- Add more records as needed

-- Define the member function 'show' for 'student'

CREATE OR REPLACE TYPE BODY student AS

MEMBER FUNCTION show RETURN VARCHAR2 IS

BEGIN

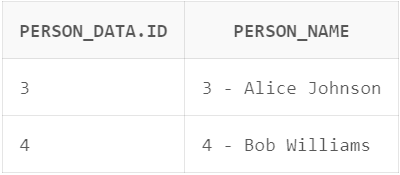
RETURN self.major;

END;

END;

-- Display id and name of persons using 'show' function

SELECT p.person\_data.id, p.person\_data.show() AS person\_name FROM studentinfo p;



-- Display major of students using 'show' function

SELECT s.person\_data.id, s.show() AS student\_major FROM studentinfo s;

