-- Drop existing objects (if you want to recreate them)

DROP TABLE EMPLOYEE;

DROP VIEW EMPLOYEE\_VIEW;

DROP INDEX IDX\_EMPLOYEE\_DEPT\_ID;

DROP SEQUENCE EMPLOYEE\_SEQ;

DROP SYNONYM EMPLOYEE\_SYNONYM;

-- Create the EMPLOYEE table

CREATE TABLE EMPLOYEE (

EMP\_ID NUMBER(5) PRIMARY KEY,

EMP\_NAME VARCHAR(10) NOT NULL,

JOB\_NAME VARCHAR(10) NOT NULL,

MANAGER\_ID NUMBER(5) DEFAULT 0,

HIRE\_DATE DATE NOT NULL,

SALARY NUMBER(8,2),

COMMISSION NUMBER(8,2) NULL,

DEPT\_ID NUMBER(4)

);

-- Insert data into the EMPLOYEE table

INSERT INTO EMPLOYEE (EMP\_ID, EMP\_NAME, JOB\_NAME, MANAGER\_ID, HIRE\_DATE, SALARY, COMMISSION, DEPT\_ID)

VALUES (1, 'John', 'Manager', 0, TO\_DATE('2021-01-15', 'YYYY-MM-DD'), 75000.00, 5000.00, 10);

INSERT INTO EMPLOYEE (EMP\_ID, EMP\_NAME, JOB\_NAME, MANAGER\_ID, HIRE\_DATE, SALARY, COMMISSION, DEPT\_ID)

VALUES (2, 'Alice', 'Developer', 1, TO\_DATE('2021-02-20', 'YYYY-MM-DD'), 60000.00, 3000.00, 20);

INSERT INTO EMPLOYEE (EMP\_ID, EMP\_NAME, JOB\_NAME, MANAGER\_ID, HIRE\_DATE, SALARY, COMMISSION, DEPT\_ID)

VALUES (3, 'Bob', 'Developer', 1, TO\_DATE('2021-03-15', 'YYYY-MM-DD'), 55000.00, NULL, 20);

INSERT INTO EMPLOYEE (EMP\_ID, EMP\_NAME, JOB\_NAME, MANAGER\_ID, HIRE\_DATE, SALARY, COMMISSION, DEPT\_ID)

VALUES (4, 'Eve', 'Analyst', 2, TO\_DATE('2021-04-10', 'YYYY-MM-DD'), 45000.00, NULL, 30);

INSERT INTO EMPLOYEE (EMP\_ID, EMP\_NAME, JOB\_NAME, MANAGER\_ID, HIRE\_DATE, SALARY, COMMISSION, DEPT\_ID)

VALUES (5, 'Mike', 'Sales', 3, TO\_DATE('2021-05-05', 'YYYY-MM-DD'), 50000.00, 2000.00, 40);

INSERT INTO EMPLOYEE (EMP\_ID, EMP\_NAME, JOB\_NAME, MANAGER\_ID, HIRE\_DATE, SALARY, COMMISSION, DEPT\_ID)

VALUES (6, 'Sarah', 'HR', 4, TO\_DATE('2021-06-25', 'YYYY-MM-DD'), 70000.00, NULL, 50);

-- Create VIEW for employees with salary greater than 50,000

CREATE VIEW EMPLOYEE\_VIEW AS

SELECT EMP\_ID, EMP\_NAME, JOB\_NAME, SALARY

FROM EMPLOYEE

WHERE SALARY > 50000;

-- Create INDEX on DEPT\_ID

CREATE INDEX IDX\_EMPLOYEE\_DEPT\_ID ON EMPLOYEE(DEPT\_ID);

-- Create SEQUENCE for employee IDs

CREATE SEQUENCE EMPLOYEE\_SEQ

START WITH 1

INCREMENT BY 1

NOCACHE

NOCYCLE;

-- Create SYNONYM for the EMPLOYEE table

CREATE SYNONYM EMPLOYEE\_SYNONYM FOR EMPLOYEE;

-- Add FOREIGN KEY constraint for MANAGER\_ID referencing EMP\_ID

ALTER TABLE EMPLOYEE

ADD CONSTRAINT FK\_MANAGER\_ID

FOREIGN KEY (MANAGER\_ID)

REFERENCES EMPLOYEE(EMP\_ID)

NOVALIDATE;

-- Add CHECK constraint for salary range

ALTER TABLE EMPLOYEE

ADD CONSTRAINT CHK\_SALARY\_RANGE

CHECK (SALARY BETWEEN 1000 AND 100000);

-- Add UNIQUE constraint for EMP\_NAME

ALTER TABLE EMPLOYEE

ADD CONSTRAINT UQ\_EMP\_NAME

UNIQUE (EMP\_NAME);