```
Ryerson Oracle 11g.sql
                                                                1/11
-- DROP SCRIPT
-- Drop indexes
BEGIN
   EXECUTE IMMEDIATE 'DROP INDEX idx salary employee;
EXCEPTION
    WHEN OTHERS THEN
        IF SQLCODE != -1418 THEN
           RAISE;
        END IF;
END;
BEGIN
   EXECUTE IMMEDIATE 'DROP INDEX idx_payment_employee;
EXCEPTION
    WHEN OTHERS THEN
        IF SQLCODE != -1418 THEN
           RAISE;
        END IF;
END;
BEGIN
   EXECUTE IMMEDIATE 'DROP INDEX idx tax employee';
EXCEPTION
   WHEN OTHERS THEN
        IF SQLCODE != -1418 THEN
           RAISE;
        END IF;
END;
BEGIN
```

```
Ryerson Oracle 11g.sql
                                                                2/11
EXCEPTION
    WHEN OTHERS THEN
        IF SQLCODE ! = -1418 THEN
           RAISE:
        END IF;
END;
-- Drop triggers
BEGIN
   EXECUTE IMMEDIATE 'DROP TRIGGER TRG BEFORE INSERT DESIGNATION;
EXCEPTION
   WHEN OTHERS THEN
        IF SQLCODE != -4080 THEN
           RAISE;
       END IF:
END;
BEGIN
   EXECUTE IMMEDIATE 'DROP TRIGGER TRG BEFORE INSERT EMPLOYEE;
EXCEPTION
    WHEN OTHERS THEN
        IF SQLCODE != -4080 THEN
           RAISE:
        END IF:
END;
BEGIN
   EXECUTE IMMEDIATE 'DROP TRIGGER TRG BEFORE INSERT SALARY;
EXCEPTION
    WHEN OTHERS THEN
        IF SQLCODE !=-4080 THEN
```

```
Ryerson Oracle 11g.sql
                                                                3/11
       END IF;
END;
BEGIN
   EXECUTE IMMEDIATE 'DROP TRIGGER TRG_BEFORE_INSERT_PAYMENT;
EXCEPTION
   WHEN OTHERS THEN
        IF SQLCODE != -4080 THEN
           RAISE;
       END IF:
END;
BEGIN
   EXECUTE IMMEDIATE 'DROP TRIGGER TRG_BEFORE_INSERT_TAX;
EXCEPTION
   WHEN OTHERS THEN
        IF SQLCODE != -4080 THEN
           RAISE:
       END IF;
END;
BEGIN
   EXECUTE IMMEDIATE 'DROP TRIGGER TRG_BEFORE_INSERT_DEDUCTION;
EXCEPTION
   WHEN OTHERS THEN
        IF SQLCODE ! = -4080 THEN
           RAISE;
        END IF;
END;
```

```
Ryerson Oracle 11g.sql
                                                                4/11
BEGIN
   EXECUTE IMMEDIATE 'DROP TABLE DEDUCTION';
EXCEPTION
   WHEN OTHERS THEN
        IF SQLCODE != -942 THEN
           RAISE;
       END IF;
END;
BEGIN
   EXECUTE IMMEDIATE 'DROP TABLE TAX';
EXCEPTION
   WHEN OTHERS THEN
        IF SQLCODE ! = -942 THEN
           RAISE:
       END IF;
END;
BEGIN
   EXECUTE IMMEDIATE 'DROP TABLE PAYMENT';
EXCEPTION
   WHEN OTHERS THEN
        IF SQLCODE != -942 THEN
           RAISE:
       END IF;
END;
BEGIN
   EXECUTE IMMEDIATE 'DROP TABLE SALARY';
EXCEPTION
   WHEN OTHERS THEN
```

```
Ryerson Oracle 11g.sql
                                                               5/11
           RAISE;
      END IF;
END;
BEGIN
   EXECUTE IMMEDIATE 'DROP TABLE EMPLOYEE';
EXCEPTION
   WHEN OTHERS THEN
        IF SQLCODE != -942 THEN
           RAISE;
       END IF;
END;
BEGIN
   EXECUTE IMMEDIATE 'DROP TABLE DESIGNATION';
EXCEPTION
   WHEN OTHERS THEN
        IF SQLCODE != -942 THEN
           RAISE;
       END IF;
END;
-- Drop sequences
BEGIN
   EXECUTE IMMEDIATE 'DROP SEQUENCE SEQ DEDUCTION';
EXCEPTION
   WHEN OTHERS THEN
        IF SQLCODE != -2289 THEN
           RAISE;
       END IF;
END;
```

```
Ryerson Oracle 11g.sql
                                                                6/11
BEGIN
   EXECUTE IMMEDIATE 'DROP SEQUENCE SEQ_TAX';
EXCEPTION
   WHEN OTHERS THEN
        IF SQLCODE != -2289 THEN
           RAISE:
        END IF;
END;
BEGIN
   EXECUTE IMMEDIATE 'DROP SEQUENCE SEQ PAYMENT';
EXCEPTION
   WHEN OTHERS THEN
        IF SQLCODE != -2289 THEN
           RAISE;
        END IF;
END;
BEGIN
   EXECUTE IMMEDIATE 'DROP SEQUENCE SEQ SALARY';
EXCEPTION
    WHEN OTHERS THEN
        IF SQLCODE != -2289 THEN
           RAISE;
        END IF;
END;
BEGIN
   EXECUTE IMMEDIATE 'DROP SEQUENCE SEQ EMPLOYEE';
EXCEPTION
```

```
Ryerson Oracle 11g.sql
                                                                7/11
       IF SQLCODE != -2289 THEN
           RAISE:
       END IF:
END;
BEGIN
   EXECUTE IMMEDIATE 'DROP SEQUENCE SEQ DESIGNATION;
EXCEPTION
   WHEN OTHERS THEN
        IF SQLCODE != -2289 THEN
           RAISE:
       END IF:
END;
-- END OF DROP SCRIPT
-- Sequences for auto-generating primary keys
CREATE SEQUENCE SEQ DESIGNATION START WITH 1 INCREMENT BY 1;
CREATE SEQUENCE SEQ EMPLOYEE START WITH 1 INCREMENT BY 1;
CREATE SEQUENCE SEQ SALARY START WITH 1 INCREMENT BY 1;
CREATE SEQUENCE SEQ PAYMENT START WITH 1 INCREMENT BY 1;
CREATE SEQUENCE SEQ TAX START WITH 1 INCREMENT BY 1;
CREATE SEQUENCE SEQ DEDUCTION START WITH 1 INCREMENT BY 1;
-- DESIGNATION table
CREATE TABLE DESIGNATION (
   DESIGNATION ID NUMBER PRIMARY KEY,
    TITLE VARCHAR2(100) NOT NULL UNIQUE
);
```

```
Ryerson Oracle 11g.sql
                                                                8/11
CREATE TABLE EMPLOYEE (
   EMPLOYEE ID NUMBER PRIMARY KEY,
   NAME VARCHAR2(100) NOT NULL,
    DESIGNATION ID NUMBER UNIQUE REFERENCES DESIGNATION(DESIGNATION
);
-- SALARY table
CREATE TABLE SALARY (
    SALARY ID NUMBER PRIMARY KEY,
   EMPLOYEE ID NUMBER UNIQUE REFERENCES EMPLOYEE (EMPLOYEE ID),
   AMOUNT NUMBER(10,2) NOT NULL CHECK (AMOUNT \geq 0)
);
-- Check if the index already exists, if not, then create it
DECLARE
    index exists NUMBER;
BEGIN
    SELECT COUNT(*) INTO index exists FROM user indexes WHERE index
    IF index exists = 0 THEN
       EXECUTE IMMEDIATE 'CREATE INDEX idx salary employee ON SAI
   END IF;
EXCEPTION
   WHEN OTHERS THEN
        IF SQLCODE = -1408 THEN
            NULL; -- Ignore the error if the column is already in
       ELSE
            RAISE; -- Propagate any other errors
       END IF;
END;
-- PAYMENT table
CREATE TABLE PAYMENT (
```

```
Ryerson Oracle 11g.sql
                                                                9/11
   EMPLOYEE ID NUMBER REFERENCES EMPLOYEE (EMPLOYEE ID),
   AMOUNT NUMBER(10,2) NOT NULL CHECK (AMOUNT >= 0),
   DATE RECEIVED DATE DEFAULT SYSDATE
);
-- TAX table
CREATE TABLE TAX (
   TAX ID NUMBER PRIMARY KEY,
   EMPLOYEE ID NUMBER REFERENCES EMPLOYEE (EMPLOYEE ID),
   TAX AMOUNT NUMBER(10,2) NOT NULL CHECK (TAX AMOUNT >= 0)
);
-- DEDUCTION table
CREATE TABLE DEDUCTION (
   DEDUCTION ID NUMBER PRIMARY KEY,
   EMPLOYEE ID NUMBER REFERENCES EMPLOYEE (EMPLOYEE ID),
    DEDUCTION AMOUNT NUMBER (10,2) NOT NULL CHECK (DEDUCTION AMOUNT
   REASON VARCHAR2 (200)
);
-- Triggers for auto-populating IDs from sequences upon insert
-- For DESIGNATION
CREATE OR REPLACE TRIGGER TRG BEFORE INSERT DESIGNATION
BEFORE INSERT ON DESIGNATION
FOR EACH ROW
BEGIN
    :NEW.DESIGNATION ID := SEQ DESIGNATION. NEXTVAL;
END;
-- For EMPLOYEE
CREATE OR REPLACE TRIGGER TRG BEFORE INSERT EMPLOYEE
BEFORE INSERT ON EMPLOYEE
```

```
Ryerson Oracle 11g.sql
                                                               10/11
BEGIN
    :NEW.EMPLOYEE ID := SEQ EMPLOYEE. NEXTVAL;
END;
-- For SALARY
CREATE OR REPLACE TRIGGER TRG BEFORE INSERT SALARY
BEFORE INSERT ON SALARY
FOR EACH ROW
BEGIN
    :NEW.SALARY ID := SEQ SALARY.NEXTVAL;
END;
-- For PAYMENT
CREATE OR REPLACE TRIGGER TRG BEFORE INSERT PAYMENT
BEFORE INSERT ON PAYMENT
FOR EACH ROW
BEGIN
    :NEW.PAYMENT ID := SEQ PAYMENT.NEXTVAL;
END;
-- For TAX
CREATE OR REPLACE TRIGGER TRG BEFORE INSERT TAX
BEFORE INSERT ON TAX
FOR EACH ROW
BEGIN
   :NEW.TAX ID := SEQ TAX.NEXTVAL;
END;
-- For DEDUCTION
CREATE OR REPLACE TRIGGER TRG BEFORE INSERT DEDUCTION
```

```
Ryerson Oracle 11g.sql
                                                               11/11
FOR EACH ROW
BEGIN
    :NEW.DEDUCTION_ID := SEQ_DEDUCTION.NEXTVAL;
END;
-- Indexes
CREATE INDEX idx salary employee ON SALARY(EMPLOYEE ID);
CREATE INDEX idx payment employee ON PAYMENT (EMPLOYEE ID);
CREATE INDEX idx tax employee ON TAX (EMPLOYEE ID);
CREATE INDEX idx deduction employee ON DEDUCTION (EMPLOYEE ID);
```