SQL queries for creating table

```
CREATE TABLE position (
  PositionId NUMBER PRIMARY KEY NOT NULL,
  PosDesc VARCHAR2(50)
);

CREATE TABLE qualification (
  QualId NUMBER PRIMARY KEY NOT NULL,
  QualDesc VARCHAR2(50)
);

CREATE TABLE emplevel (
  LevelNo NUMBER PRIMARY KEY NOT NULL,
  LowSalary NUMBER,
  HighSalary NUMBER
);

CREATE TABLE dept (
  DeptId NUMBER PRIMARY KEY NOT NULL,
  DeptName VARCHAR2(20),
  Location VARCHAR2(50),
  EmployeeId NUMBER
);

CREATE TABLE employee (
  EmployeeId NUMBER PRIMARY KEY NOT NULL,
  Lname VARCHAR2(20),
  Fname VARCHAR2(20) NOT NULL,
  PositionId NUMBER,
  FOREIGN KEY (PositionId) REFERENCES position(PositionId),
  Supervisor VARCHAR2(20),
  HireDate DATE,
  Salary NUMBER,
  Commission NUMBER,
  DeptId NUMBER,
  FOREIGN KEY (DeptId) REFERENCES dept(DeptId),
  QualId NUMBER,
  FOREIGN KEY (QualId) REFERENCES qualification(QualId)
);

ALTER TABLE dept ADD CONSTRAINT emp_fk FOREIGN KEY (EmployeeId) REFERENCES employee(EmployeeId);

CREATE TABLE dependent (
  EmployeeId NUMBER,
  FOREIGN KEY (EmployeeId) REFERENCES employee(EmployeeId),
  DependentId NUMBER PRIMARY KEY NOT NULL,
  DepDOB DATE,
  Relation VARCHAR2(20)
);
```

SQL queries for creating table

1. Insert data into POSITION

```
INSERT INTO position (PositionId, PosDesc)
VALUES (1, 'Manager');
```

2. Insert data into QUALIFICATION

```
INSERT INTO qualification (QualId, QualDesc)
VALUES (1, 'MBA');
```

3. Insert data into EMPLEVEL

```
INSERT INTO emplevel (LevelNo, LowSalary, HighSalary)
VALUES (1, 50000, 100000);
```

4. Insert data into DEPT (without EmployeeId initially due to circular dependency)

```
INSERT INTO dept (DeptId, DeptName, Location, EmployeeId)
VALUES (1, 'Finance', 'Building A', NULL);
```

5. Insert data into EMPLOYEE

```
INSERT INTO employee (EmployeeId, Lname, Fname, PositionId, Supervisor, HireDate, Salary, Commission, DeptId,
QualId)
VALUES (1, 'Doe', 'John', 1, 'CEO', TO_DATE('2020-01-15', 'YYYY-MM-DD'), 75000, 5000, 1, 1);
```

6. Update DEPT to set EmployeeId (Circular Reference Handling)

```
UPDATE dept SET EmployeeId = 1 WHERE DeptId = 1;
```

7. Insert data into DEPENDENT

```
INSERT INTO dependent (EmployeeId, DependentId, DepDOB, Relation)
VALUES (1, 1, TO_DATE('2010-05-20', 'YYYY-MM-DD'), 'Child');
```