

```
-- Create the database and tables
```

```
CREATE DATABASE BestDealsStores;
```

```
USE BestDealsStores;
```

```
CREATE TABLE bd_stores (
```

```
    store_id INT DEFAULT NULL,
```

```
    store_name VARCHAR(100) NOT NULL,
```

```
    store_mgr_id INT DEFAULT NULL,
```

```
    city VARCHAR(100) DEFAULT NULL,
```

```
    state CHAR(2) NOT NULL,
```

```
    zip_code CHAR(5) NOT NULL,
```

```
    CONSTRAINT chk_store_id CHECK (store_id BETWEEN 11 AND 99)
```

```
);
```

```
CREATE TABLE bd_departments (
```

```
    department_id INT DEFAULT 300,
```

```
    department_name VARCHAR(100) NOT NULL,
```

```
    CONSTRAINT chk_department_id CHECK (department_id BETWEEN 300 AND 399)
```

```
);
```

```
CREATE TABLE bd_employees (
```

```
    employee_id INT NOT NULL,
```

```
    first_name VARCHAR(50) NOT NULL,
```

```
    last_name VARCHAR(50) NOT NULL,
```

```
    birth_date DATE NOT NULL,
```

```
    hire_date DATE DEFAULT CURRENT_DATE,
```

```
    gender CHAR(1) NOT NULL,
```

```
    ssn INT NOT NULL,
```

```
    store_id INT DEFAULT NULL,
```

```
    department_id INT DEFAULT 300,
```

```
    job_class CHAR(1) DEFAULT 'T',
```

```
    job_level INT NOT NULL,
```

```
    salary DECIMAL(10, 2) NOT NULL,
```

```
    commission DECIMAL(10, 2) DEFAULT 0,
```

```

    bonus DECIMAL(10, 2) DEFAULT 0,
    pension_contribution BOOLEAN DEFAULT 0,
    coach_id INT DEFAULT NULL,
    CONSTRAINT chk_birth_date CHECK (YEAR(birth_date) >= 1980),
    CONSTRAINT chk_ssn CHECK (ssn BETWEEN 1 AND 999999999),
    CONSTRAINT chk_gender CHECK (gender IN ('F', 'M')),
    CONSTRAINT chk_pension_contribution CHECK (pension_contribution IN (0, 1)),
    CONSTRAINT chk_job_class CHECK (job_class IN ('T', 'J', 'C', 'M')),
    CONSTRAINT chk_job_level CHECK (job_level BETWEEN 1 AND 9),
    CONSTRAINT chk_salary CHECK (salary <= 125000.00),
    CONSTRAINT chk_salary_commission CHECK (salary > commission),
    CONSTRAINT chk_bonus_commission CHECK (bonus > 0 OR commission > 0),
    CONSTRAINT chk_commission CHECK (commission < 0.085 * salary),
    CONSTRAINT chk_hire_date CHECK (hire_date > birth_date)
);

```

```

CREATE TABLE bd_store_departments (
    store_id INT NOT NULL,
    department_id INT NOT NULL
);

```

-- Add primary keys

```

ALTER TABLE bd_stores ADD PRIMARY KEY (store_id);
ALTER TABLE bd_departments ADD PRIMARY KEY (department_id);
ALTER TABLE bd_employees ADD PRIMARY KEY (employee_id);
ALTER TABLE bd_store_departments ADD PRIMARY KEY (store_id, department_id);

```

-- Add foreign keys

```

ALTER TABLE bd_stores ADD CONSTRAINT fk_store_mgr_id FOREIGN KEY (store_mgr_id)
REFERENCES bd_employees(employee_id);

ALTER TABLE bd_employees ADD CONSTRAINT fk_store_id FOREIGN KEY (store_id) REFERENCES
bd_stores(store_id);

ALTER TABLE bd_employees ADD CONSTRAINT fk_department_id FOREIGN KEY (department_id)
REFERENCES bd_departments(department_id);

ALTER TABLE bd_employees ADD CONSTRAINT fk_coach_id FOREIGN KEY (coach_id) REFERENCES
bd_employees(employee_id);

```

```
ALTER TABLE bd_store_departments ADD CONSTRAINT fk_store_id FOREIGN KEY (store_id)
REFERENCES bd_stores(store_id);
```

```
ALTER TABLE bd_store_departments ADD CONSTRAINT fk_department_id FOREIGN KEY
(department_id) REFERENCES bd_departments(department_id);
```

```
-- Add NOT NULL constraints for store_id and city in bd_stores
```

```
ALTER TABLE bd_stores MODIFY store_id INT NOT NULL;
```

```
ALTER TABLE bd_stores MODIFY city VARCHAR(100) NOT NULL;
```