

TASK 1

```
CREATE TABLE CarModels(  
  carModelID int IDENTITY,  
  make nvarchar(20) NOT NULL,  
  model nvarchar(20) NOT NULL,  
  engineSize numeric(2,1) NOT NULL,  
  engineType nvarchar(10) NOT NULL,  
  PRIMARY KEY(carModelID)  
)
```

TASK 2

```
INSERT INTO CarModels ( make, model, engineSize, engineType )  
VALUES ('Vauxhall', 'Astra', 1.8, 'petrol');
```

TASK 3

```
CREATE TABLE Cars(  
registration nvarchar(8) PRIMARY KEY,  
colour nvarchar(10) NOT NULL,  
dateOfRegistration datetime NOT NULL,  
mileage int,  
available bit NOT NULL,  
carModelID int NOT NULL,  
CONSTRAINT FK_Cars_CarModels  
FOREIGN KEY(carModelID) REFERENCES CarModels(carModelID)  
)
```

TASK 4

```
CREATE TABLE Customers(  
customerID int IDENTITY,  
firstname nvarchar(20) NOT NULL,  
lastname nvarchar(50) NOT NULL,  
address nvarchar(50) NOT NULL,  
phoneNumber nvarchar(12),  
accountBalance money,  
PRIMARY KEY(customerID)  
)
```

TASK 5

```
CREATE TABLE Employees(  
    employeeID int IDENTITY,  
    firstname nvarchar(20) NOT NULL,  
    lastname nvarchar(50) NOT NULL,  
    jobtitle nvarchar(20) NOT NULL,  
    salary money NOT NULL,  
    PRIMARY KEY(employeeID)  
)  
  
CREATE TABLE Locations(  
    locationID int IDENTITY,  
    town nvarchar(20) NOT NULL,  
    address nvarchar(50) NOT NULL,  
    PRIMARY KEY(locationID)  
)  
  
CREATE TABLE EmployeesLocations(  
    locationID int,  
    employeeID int,  
    PRIMARY KEY(locationID, employeeID),  
    CONSTRAINT FK_EmployeesLocations_Locations  
    FOREIGN KEY(locationID) REFERENCES Locations(locationID),  
    CONSTRAINT FK_EmployeesLocations_Employees  
    FOREIGN KEY(employeeID) REFERENCES Employees(employeeID))
```

TASK 6

ALTER TABLE Cars

ADD

COLUMN locationID int,

CONSTRAINT FK_Cars_Locations

FOREIGN KEY(locationID) REFERENCES Locations(locationID)

TASK 7

```
CREATE TABLE Hires(  
    startDate datetime NOT NULL,  
    endDate datetime,  
    CDWChosen bit NOT NULL,  
    startMileage int NOT NULL,  
    endMileage int,  
    status nvarchar(10),  
    customerID int NOT NULL,  
    registration nvarchar(8) NOT NULL,  
    PRIMARY KEY(customerID, registration, startDate),  
    CONSTRAINT FK_Hires_Customers  
    FOREIGN KEY(customerID) REFERENCES Customers(customerID),  
    CONSTRAINT FK_Hires_Cars  
    FOREIGN KEY(registration) REFERENCES Cars(registration)  
)
```

```
CREATE TABLE CarTypes(  
    description nvarchar(15),  
    dailyCost money NOT NULL,  
    CDWDailyCost money NOT NULL,  
    PRIMARY KEY(description)  
)
```

```
ALTER TABLE CarModels
```

```
ADD
```

```
COLUMN carType nvarchar(15),
```

```
CONSTRAINT FK_CarModels_CarTypes
```

```
FOREIGN KEY(carType) REFERENCES CarTypes(description)
```