```sql
 1  CREATE DATABASE Seminar6
 2  GO
 3  USE Seminar6
 4  GO
 5
 6  CREATE TABLE TrainTypes(
 7      typeId INT PRIMARY KEY,
 8      typeName VARCHAR(50)
 9  );
10
11  INSERT INTO TrainTypes VALUES
12  (1, 'abur'),
13  (2, 'electric');
14
15  CREATE TABLE Trains(
16      trainId int PRIMARY KEY,
17      name VARCHAR(50),
18      typeId INT FOREIGN KEY REFERENCES TrainTypes(typeId)
19  );
20
21  INSERT INTO Trains VALUES
22  (1, 'train1', 1),
23  (2, 'train2', 2),
24  (3, 'train3', 1),
25  (4, 'train4', 2);
26
27
28  CREATE TABLE Stations(
29      stationId INT PRIMARY KEY,
30      stationName VARCHAR(50) UNIQUE
31  );
32
33  INSERT INTO Stations VALUES
34  (1, 'Cluj'),
35  (2, 'Mures'),
36  (3, 'Bucuresti'),
37  (4, 'Iasi');
38
39  CREATE TABLE Routes(
40      routeId INT PRIMARY KEY,
41      routeName VARCHAR(50) UNIQUE,
42      trainId INT FOREIGN KEY REFERENCES Trains(trainId)
43  );
44
45  INSERT INTO Routes VALUES
46  (3, 'Cluj-Iasi-Bucuresti',3)
47  (1, 'Cluj-Iasi', 1),
48  (2,'Cluj-Bucuresti', 2);
49
50
51  CREATE TABLE StationRoutes(
52      routeId INT FOREIGN KEY REFERENCES Routes(routeId),
```

```sql
53        stationId INT FOREIGN KEY REFERENCES Stations(stationId),
54        arrival TIME,
55        departure TIME,
56        CONSTRAINT pk_stationRoutes PRIMARY KEY (routeId, stationId)
57  );
58
59  --DROP PROCEDURE add_station_to_route
60  GO
61  CREATE PROCEDURE add_station_to_route(
62        @routeName VARCHAR(50),
63        @stationName VARCHAR(50),
64        @arrival TIME,
65        @departure TIME)
66  AS
67  BEGIN
68        DECLARE @nr INT, @rId INT, @sId INT;
69
70        SELECT @rId = routeId FROM Routes WHERE routeName = @routeName
71        SELECT @sId = stationId FROM Stations WHERE stationName = @stationName
72
73        SELECT @nr = COUNT(*) FROM StationRoutes WHERE routeId = @rId AND stationId = ⏎
          @sId
74
75        IF @nr = 0
76        BEGIN
77            INSERT INTO StationRoutes VALUES (@rId, @sId, @arrival, @departure)
78        END
79        ELSE
80        BEGIN
81            UPDATE StationRoutes
82            SET arrival = @arrival, departure = @departure
83            WHERE @rId = routeId AND @sId = stationId
84        END
85  END
86  GO
87  DELETE FROM StationRoutes
88
89  add_station_to_route 'Cluj-Iasi', 'Cluj', '6:00:00', '7:00:00';
90  add_station_to_route 'Cluj-Iasi', 'Mures', '8:00:00', '8:10:00';
91  add_station_to_route 'Cluj-Iasi', 'Iasi', '10:00:00', '10:10:00';
92
93  add_station_to_route 'Cluj-Bucuresti', 'Cluj', '11:00:00', '11:30:00';
94  add_station_to_route 'Cluj-Bucuresti', 'Mures', '12:00:00', '12:10:00';
95  add_station_to_route 'Cluj-Bucuresti', 'Bucuresti', '16:00:00', '16:20:00';
96
97  add_station_to_route 'Cluj-Iasi-Bucuresti', 'Cluj', '11:00:00', '11:30:00';
98  add_station_to_route 'Cluj-Iasi-Bucuresti', 'Mures', '12:00:00', '12:10:00';
99  add_station_to_route 'Cluj-Iasi-Bucuresti', 'Iasi', '16:00:00', '16:20:00';
100 add_station_to_route 'Cluj-Iasi-Bucuresti', 'Bucuresti', '20:00:00', '20:30:00';
101
102
103 SELECT * FROM StationRoutes
```

```
104  ORDER BY routeId, Arrival
105
106  CREATE VIEW RoutesNames AS
107      SELECT routeName
108      FROM Routes R
109      WHERE (SELECT COUNT (*) FROM Stations) =
110          (SELECT COUNT(*) FROM StationRoutes RS WHERE R.routeId = RS.routeId)
111
112  SELECT * FROM RoutesNames
113
114  GO
115  CREATE FUNCTION stationsWithRRooutes (@R INT)
116  RETURNS TABLE
117  AS
118  RETURN
119      SELECT stationName
120      FROM StationRoutes SR INNER JOIN Stations S ON SR.stationId = S.stationId
121      GROUP BY S.stationName
122      HAVING COUNT(*) > @R
123  GO
124
125  SELECT * FROM stationsWithRRooutes(3)
```