

```
1  --CELEBAL TECHNOLOGIES
2  --SUMMER INTERN
3  --CHETANYA YADAV
4  --ID:CT_CSI_SQ_1260
5  --ASSIGNMENT-Student Allotment SQL Problem
6
7  -- Create StudentDetails table first
8  CREATE TABLE StudentDetails (
9      StudentId INT PRIMARY KEY,
10     StudentName NVARCHAR(100),
11     GPA FLOAT,
12     Branch NVARCHAR(50),
13     Section NVARCHAR(50)
14 );
15
16 -- Create SubjectDetails table
17 CREATE TABLE SubjectDetails (
18     SubjectId NVARCHAR(50) PRIMARY KEY,
19     SubjectName NVARCHAR(100),
20     MaxSeats INT,
21     RemainingSeats INT
22 );
23
24 -- Create StudentPreference table after StudentDetails and
    SubjectDetails
25 CREATE TABLE StudentPreference (
26     StudentId INT,
27     SubjectId NVARCHAR(50),
28     Preference INT,
29     PRIMARY KEY (StudentId, SubjectId, Preference),
30     FOREIGN KEY (StudentId) REFERENCES StudentDetails(StudentId),
31     FOREIGN KEY (SubjectId) REFERENCES SubjectDetails(SubjectId)
32 );
33
34 -- Create Allotments table
35 CREATE TABLE Allotments (
36     SubjectId NVARCHAR(50),
37     StudentId INT,
38     PRIMARY KEY (SubjectId, StudentId),
39     FOREIGN KEY (SubjectId) REFERENCES SubjectDetails(SubjectId),
40     FOREIGN KEY (StudentId) REFERENCES StudentDetails(StudentId)
41 );
42
43 -- Create UnallotedStudents table
44 CREATE TABLE UnallotedStudents (
45     StudentId INT PRIMARY KEY,
46     FOREIGN KEY (StudentId) REFERENCES StudentDetails(StudentId)
47 );
48
49 -- Insert data into StudentDetails
50 INSERT INTO StudentDetails (StudentId, StudentName, GPA, Branch,
    Section) VALUES
51 (159103036, 'Mohit Agarwal', 8.9, 'CCE', 'A'),
```

```
52 (159103037, 'Rohit Agarwal', 5.2, 'CCE', 'A'),
53 (159103038, 'Shohit Garg', 7.1, 'CCE', 'B'),
54 (159103039, 'Mrinal Malhotra', 7.9, 'CCE', 'A'),
55 (159103040, 'Mehreet Singh', 5.6, 'CCE', 'A'),
56 (159103041, 'Arjun Tehlan', 9.2, 'CCE', 'B');
57
58 -- Insert data into SubjectDetails
59 INSERT INTO SubjectDetails (SubjectId, SubjectName, MaxSeats,
    RemainingSeats) VALUES
60 ('P01491', 'Basics of Political Science', 60, 2),
61 ('P01492', 'Basics of Accounting', 120, 119),
62 ('P01493', 'Basics of Financial Markets', 90, 90),
63 ('P01494', 'Eco philosophy', 60, 50),
64 ('P01495', 'Automotive Trends', 60, 60);
65
66 -- Insert data into StudentPreference
67 INSERT INTO StudentPreference (StudentId, SubjectId, Preference) VALUES
68 (159103036, 'P01491', 1),
69 (159103036, 'P01492', 2),
70 (159103036, 'P01493', 3),
71 (159103036, 'P01494', 4),
72 (159103036, 'P01495', 5),
73 (159103037, 'P01492', 1),
74 (159103037, 'P01493', 2),
75 (159103037, 'P01494', 3),
76 (159103037, 'P01495', 4),
77 (159103037, 'P01491', 5),
78 (159103038, 'P01493', 1),
79 (159103038, 'P01494', 2),
80 (159103038, 'P01495', 3),
81 (159103038, 'P01491', 4),
82 (159103038, 'P01492', 5),
83 (159103039, 'P01494', 1),
84 (159103039, 'P01495', 2),
85 (159103039, 'P01491', 3),
86 (159103039, 'P01492', 4),
87 (159103039, 'P01493', 5),
88 (159103040, 'P01495', 1),
89 (159103040, 'P01491', 2),
90 (159103040, 'P01492', 3),
91 (159103040, 'P01493', 4),
92 (159103040, 'P01494', 5),
93 (159103041, 'P01491', 1),
94 (159103041, 'P01492', 2),
95 (159103041, 'P01493', 3),
96 (159103041, 'P01494', 4),
97 (159103041, 'P01495', 5);
98
99
```