**2014 Question 3: Seating Chart (9 points)**

| Total Scored out of 9 |  |
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**Part A: Seating Chart Constructor (5 points)**

Intent: Create SeatingChart object from list of students

+1 seats = new Student[rows][cols]; (or equivalent code)

+1 Accesses all elements of studentList (no bounds errors on studentList)

+1 Accesses all necessary elements of seats array

(no bounds errors on seats array, point lost if access not column-major order)

+1 Assigns value from studentList of at least one element in seats array

+1 On exit: All elements of seats have correct values (minor loop bounds errors ok)

**Part B: removeAbsentStudents(4 points)**

Intent: Remove students will a more than given number of absences from seating chart and return count of students removed

+1 Accesses all elements of seats (no bounds errors)

+1 Calls getAbsenceCount() on a Student object (point lost if null case not handled correctly)

+1 Assigns null to all elements in seats array when absence count for

occupying student > allowedAbsences

(point lost if seats array element changed in other cases)

+1 Computes and returns correct number of students removed

**Question-Specific Penalties**

-1(v) Consistently uses incorrect array name instead of seats or studentList