Assignment 2023 Qn 3

You are organizing a concert event in a theatre, where the seating arrangements are on a first come first serve basis. No reservations are allowed. The students who arrive early get the best seats to enjoy the concert. The theatre can only accommodate a limited number of students and when it is full, no more students can be seated. Create a class called Concert that implements this scenario using a queue data structure.

The class should have the following methods:

* addStudent(int studentID): Adds a student to the queue and assigns them a seat.
* removeStudent(): Removes the student at the front of the queue and frees up their seat.
* getRemainingSeats(): Returns the number of remaining seats in the theater.
* isTheaterFull(): Returns a Boolean indicating whether the theatre is full or not.

Note: You are free to make any assumptions and choose any data structure to implement the methods as long as it follows the problem statement. (30)