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| **package** com.company;  **public class** Main {  **public** Main() {  }   **public static void** main(String[] args) {  Theatre theatre = **new** Theatre(**"Olympian"**, 8, 12);  theatre.getSeats();  **if** (theatre.reserveSeat(**"H11"**)) {  System.***out***.println(**"Please pay"**);  } **else** {  System.***out***.println(**"Sorry, seat is taken"**);  }   **if** (theatre.reserveSeat(**"H11"**)) {  System.***out***.println(**"Please pay"**);  } **else** {  System.***out***.println(**"Sorry, seat is taken"**);  }   } } | **package** com.company;  **import** java.util.\*;  **public class** Theatre {  **private final** String **theatreName**;  *//making it more generic, by using collection // private Collection<Seat> seats = new LinkedList<Seat>(); // private Collection<Seat> seats = new HashSet<Seat>();*  *//returns element in scattered order* **private** Collection<Seat> **seats** = **new** LinkedHashSet<Seat>();   **public** Theatre(String theatreName, **int** numRows, **int** seatsPerRow) {  **this**.**theatreName** = theatreName;  **int** lastRow = 65 + (numRows - 1);   **for**(**char** row = **'A'**; row <= lastRow; ++row) {  **for**(**int** seatNum = 1; seatNum <= seatsPerRow; ++seatNum) {  Seat seat = **new** Seat(row + String.*format*(**"%02d"**, seatNum));  **this**.**seats**.add(seat);  }  }  }   **public** String getTheatreName() {  **return this**.**theatreName**;  }   **public boolean** reserveSeat(String seatNumber) {  Seat requestedSeat = **null**;  Iterator var3 = **this**.**seats**.iterator();   **while**(var3.hasNext()) {  Seat seat = (Seat)var3.next();  **if** (seat.getSeatNumber().equals(seatNumber)) {  requestedSeat = seat;  **break**;  }  }   **if** (requestedSeat == **null**) {  System.***out***.println(**"There is no seat "** + seatNumber);  **return false**;  } **else** {  **return** requestedSeat.reserve();  }  }   **public void** getSeats() {  Iterator var1 = **this**.**seats**.iterator();   **while**(var1.hasNext()) {  Seat seat = (Seat)var1.next();  System.***out***.println(seat.getSeatNumber());  }   }   } | **package** com.company;  **public class** Seat {  **private final** String **seatNumber**;  **private boolean reserved** = **false**;   **public** Seat(String seatNumber) {  **this**.**seatNumber** = seatNumber;  }   **public boolean** reserve() {  **if** (!**this**.**reserved**) {  **this**.**reserved** = **true**;  System.***out***.println(**"Seat "** + **this**.**seatNumber** + **" reserved"**);  **return true**;  } **else** {  **return false**;  }  }   **public boolean** cancel() {  **if** (**this**.**reserved**) {  **this**.**reserved** = **false**;  System.***out***.println(**"Reservation of seat "** + **this**.**seatNumber** + **" cancelled"**);  **return true**;  } **else** {  **return false**;  }  }   **public** String getSeatNumber() {  **return this**.**seatNumber**;  } } |