

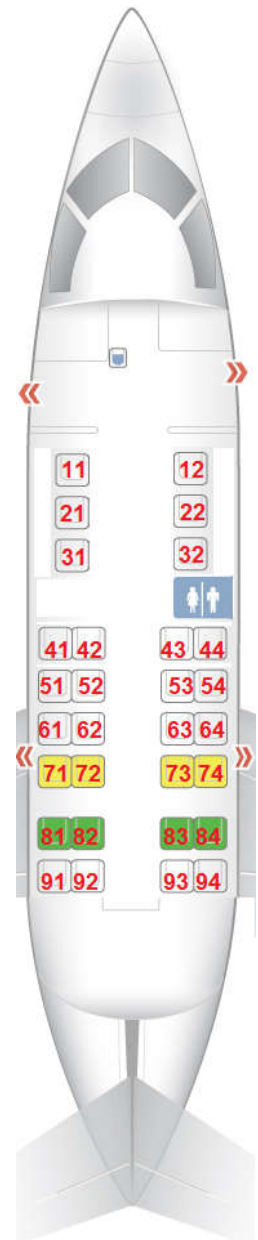
**Objectives:**

- To demonstrate how to define classes and create objects.
- To declare array reference variables and create arrays.
- To use multidimensional ragged arrays.
- To store and process objects in arrays.

**Task: Flight Reservation System II**

In this phase, you need to consider a new small flight using the following seat layouts. Note that the first three rows has two seats only while the other rows has four seats.

- Create a **Seat** class that has:
  - Private **seat number** with getter and setter methods.
  - Private boolean **reserved** with getter and setter methods.
  - A constructor that takes seat number.
  - A static method **isValid** that takes a seat number and returns if the seat number is valid or not.
  - A **printInfo** method that prints out seat object information.
- Create a **Flight** driver class that has the following:
  - A private static ragged array of seats reflecting the new mentioned flight seat map.
  - A main method that initialize the seats array and then keep displays a menu containing the following options (similar to phase I):
    1. Reserve a new empty seat.
    2. Delete a reserved seat.
    3. Delete all reserved seats.
    4. Print out flight seats map.
    5. Quit.
  - Implement menu options as explained in **phase I** but using the seats ragged array to store/retrieve information.
  - Regarding **option 4**: in this option, print out the seat information as in the flight seats map + if the seat is empty or reserved.



Good Luck!!!