*C++ 9th Edition Chapter 7 Group Project*

Theater Seating

Write a program that can be used by a small theater to sell ticket for performances. The theater’s auditorium has 15 rows of seats, with 30 seats in each row. The program should display a screen that shows which seats are available and which are taken. For example, the following screen shows a chart depicting each seat in the theater. Seats that are taken are represented by an \* symbol and seats that are available are represented by the # symbol.

Seats

1 2 3 4 5 6 7 8 9 0…28 29 30

Row 1 \* \* \* \* \* # # # # #...# # #

Row 2 # # # # # # # # # #...# # \*

…

Row15 \* \* # # # # # # # #...\* \* #

**Here is a list of the tasks this program must perform:**

When the program begins, it should ask the user to enter the seat prices for each row. The prices can be stored in a separate array.

Once the prices are entered, the program should display a seating chart similar to the one shown above. The user may enter the row and seat numbers for tickets being sold. Every time a ticket or group of tickets is purchased, the program should display the total ticket prices and update the seating chart.

The program should keep a total of all the ticket sales. The user should be given an option of viewing this amount.

The program should also give the user an option to see a list of how many seats have been sold, how many seats are available in each row, and how many seats are available in the entire auditorium.

**Input Validation:**

When tickets are being sold, do no accept row or seat numbers that do not exist. When someone requests a particular seat, the program should make sure that seat is available before it is sold.