

1. Develop a simple program of reservation system for a concert. The specification of the system is as follows.
 - There are three seat types: S type, A type, B type.
 - There are four menu for reservation system: Reserve, Search, Cancel, Quit
 - For **Reserve** menu, only one seat can be reserved for each reservation. The program should receive the seat type, the name, and the seat number.
 - For **Search** menu, all seat statuses are printed.
 - For **Cancel** menu, the program should receive the name and cancel the reservation. You need to print the error message for the name that is not reserved.
 - If users write invalid menu or invalid seat type or invalid seat number, you need to print the error message.

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This is a reservation system for music concert.

Reserve: 1, Search: 2, Cancel: 3, Quit: 4 >> 1
Seat Type S(1), A(2), B(3) >> 1
S >> -----
Name >> Mike
Seat Number >> 1

Reserve: 1, Search: 2, Cancel: 3, Quit: 4 >> 1
Seat Type S(1), A(2), B(3) >> 2
A >> -----
Name >> Tony
Seat Number >> 10

Reserve: 1, Search: 2, Cancel: 3, Quit: 4 >> 2
S >> Mike -----
A >> ----- Tony -----
B >> -----
This is the end of the search.

Reserve: 1, Search: 2, Cancel: 3, Quit: 4 >> 3
Seat Type S(1), A(2), B(3) >> 2
A >> ----- Tony -----
Name >> Tony

Reserve: 1, Search: 2, Cancel: 3, Quit: 4 >> 2
S >> Mike -----
A >> -----
B >> -----
This is the end of the search.

Reserve: 1, Search: 2, Cancel: 3, Quit: 4 >> 4
Thank you!

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Figure 1: Example Console Window