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import java.util.Scanner;
import java.util.Date;
public class Main { private static int[] berths = new int[13];
public static void main(String[] args)
{
System.out.println(" *****WELCOME TO THE SOUTH CENTRAL RAILWAY RESERVATION
SYSTEM!!*****");
System.out.println(" HAVE A SAFE JOURNEY!!");
System.out.println(); for (int i = 0; i < 12; i++)
{
berths[i] = 0;
}
Scanner s = new Scanner(System.in);
int choice = 1;
System.out.print("Please select your type of berth:\n1.Upper Berth\n2.Lower Berth\n0.Exit.\n");
choice = s.nextInt();
while (choice != 0)
{
int seatnumber = 0;
if (choice == 1)
{
seatnumber = bookUpper();
if (seatnumber == -1)
{
seatnumber = bookLower();
if (seatnumber != -1)
{
System.out.println("Sorry, there are no Upper Berths available. But we do have a Lower Berth.");
boardingPass(seatnumber);
}
}
else
{
System.out.println(" Congratulations, we have a Upper Berth available!");
boardingPass(seatnumber);
}
}
}
else if (choice == 2)
{
seatnumber = bookLower();
if (seatnumber == -1)
{
seatnumber = bookUpper();
if (seatnumber != -1)
{
System.out.println("Sorry, there are no Lower Berths available. But we do have a Upper Berth.");
boardingPass(seatnumber);
}
}
}
else
{
System.out.println(" Congratulations, we have a Lower berth available!");
boardingPass(seatnumber);
}
}
}

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}
else
{
    System.out.println("Your choice is invalid. Please provide valid choice!");
    choice = 0;
}
if (seatnumber == -1)
{
    System.out.println("Sorry, there are no Upper Berths or no Lower Berths available");
    System.out.println();
}
System.out.print("Please select your type of berth:\n1.Upper Berth\n2.Lower Berth\n0.Exit.\n");
choice = s.nextInt();
}
}
private static int bookUpper()
{
    for (int i = 0; i < 6; i++)
    {
        if (berths[i] == 0)
        {
            berths[i] = 1;
            return i + 1;
        }
    }
    return -1;
}
private static int bookLower()
{
    for (int i = 6; i < 12; i++)
    {
        if (berths[i] == 0)
        {
            berths[i] = 1;
            return i + 1;
        }
    }
    return -1;
}
private static void boardingPass(int berthnumber)
{
    Date timenow = new Date(); System.out.println();
    System.out.println("Date: " + timenow.toString());
    System.out.println("Boarding pass for berth number: " + berthnumber);
    System.out.println("Your Booking Successful!!!");
    System.out.println("This ticket is non-refundable.");
    System.out.println("Please be polite,keep your place clean . Have a safe journey.");
    System.out.println("!!Have a great day!!!"); System.out.println();
}
}

```