

## LatinSquare.java

```
1 package intro;
2
3 import java.util.Scanner;
4
5 public class LatinSquare {
6
7     public static void main(String[] args) {
8
9         Scanner input = new Scanner(System.in);
10        System.out.println("    Latin Squares");
11        System.out.println();
12        System.out.print("Enter any integer ==> ");
13        int n = input.nextInt();
14        int[][] square = new int[n][n];
15        createLatin(square, n);
16        System.out.println();
17        displayLatin(square);
18        input.close();
19    }
20
21    public static void createLatin(int[][] square, int n) {
22
23        int start = 1;
24        for (int row = 0; row < square.length; row++) {
25            for (int col = 0; col < square[row].length; col++) {
26                square[row][col] = start;
27                start++;
28                if (start == n+1) {
29                    start = 1;
30                }
31            }
32            start++;
33        }
34    }
35
36    public static void displayLatin(int[][] square) {
37
38        for (int i = 0; i < square.length; i++) {
39            for (int k = 0; k < square[0].length; k++) {
40                System.out.print(square[i][k] + " ");
41            }
42            System.out.println();
43        }
44    }
45 }
46
47
```