

Please attempt the following problem and send in your solutions to tambola@roposo.com.

Have fun solving it!

## Tambola Ticket generator:

Write a program which prints a sheet (of 6 tickets) of Tambola tickets.

## Requirements:

- 1. Each ticket contains exactly 15 numbers ranging from 1 to 90 in 3x9 matrix (see e.g. output).
- 2. No number should repeat within a sheet.
- 3. Every column of each ticket should have at least 1 number, i.e. no column should be completely blank.
- 4. First column should have numbers from 1..9, second from 10..19, third from 20..29 and so on to the ninth column having numbers from 80..90.
- 5. Every row should have exactly 5 numbers.
- 6. All numbers in a column of a ticket must be in increasing order.

Bonus: Extend the program to print a Tambola booklet containing multiple sheets and no two tickets across different sheets should have more than 8 common numbers.

## **Output Format:**

Program should print 6 tickets separated by 2 blank rows each. Each ticket must be represented by 3 rows of 9 comma separated columns.

## Example:

1,,20,,42,,64,,86 ,11,,32,,55,,72,88 5,,23,,44,57,,77,

2,,22,33,,51,,,81 ,12,24,,45,,61,78, ,15,,35,,,62,79,90

,10,27,30,,,65,71, 4,,,31,40,52,,,80 ,13,,34,,58,,76,89

3,,21,,41,,60,70, ,17,,37,48,,63,,82 9,19,28,,,59,66,

,16,,38,43,,67,73, 6,,25,,,50,68,,83 ,18,26,,46,56,,,84

,14,,36,47,,69,,85 7,,29,,,53,,74,87 8,,,39,49,54,,75,