```
clc;
clear;
close all;

check = false;
while ~check
    matrix = randi([0 1],3,9);
    row_check = all(sum(matrix,2) == 5);
    col_check = all(sum(matrix,1) >= 1);

    if row_check && col_check
        check = true;
    end
end

ranges = {1:9, 10:19, 20:29, 30:39, 40:49, 50:59, 60:69, 70:79,
 80:90};
ticket = zeros(3,9);

for col = 1:9
    ones_count = sum(matrix(:,col));
    nums = randperm(length(ranges{col}), ones_count);
    nums = ranges{col}(nums);
    nums = sort(nums);

    idx = find(matrix(:,col) == 1);
    ticket(idx, col) = nums;
end

% DISPLAY SECTION
disp('Binary Layout Matrix (1 = number present):');
disp(matrix);

disp('Final Tambola Ticket:');
disp(ticket);

% Pretty table format
colNames =
 {'1-9','10-19','20-29','30-39','40-49','50-59','60-69','70-79','80-90'};
T = array2table(ticket,'VariableNames',colNames);
disp(T);
```

```
Binary Layout Matrix (1 = number present):
     1     1     1     0     1     0     0     1     0
     0     1     1     1     1     0     0     1     0
     0     1     1     0     0     1     1     0     1

Final Tambola Ticket:
     7    15    20     0    44     0     0    75     0
     0    16    24    37    46     0     0    76     0
     0    17    26     0     0    56    64     0    85
```

```
1-9    10-19    20-29    30-39    40-49    50-59    60-69    70-79
80-90
___    _____    _____    _____    _____    _____    _____    _____
_____

 7      15       20       0        44       0        0        75
  0
 0      16       24       37       46       0        0        76
  0
 0      17       26       0        0        56       64       0
 85
```

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