

Generating Tambola Tickets

Anubhav Rathore Lab Assignment - 2

Contents

- [Defaults](#)
- [Variables and Constants](#)
- [to avoid all row being zero for a column](#)
- [Making active rows](#)
- [Generating Numbers following column-rule](#)
- [Displaying tickets](#)

Defaults

```
close all;
clear all;
clc;
```

Variables and Constants

```
colCount = zeros(1,9);
```

to avoid all row being zero for a column

```
while any(colCount == 0)
```

```
    tickets = zeros(3,9);
```

Making active rows

```
for row = 1:3
    active_col = randperm(9,5); %Getting random row numbers
    tickets(row, active_col) = 1;
end
```

Generating Numbers following column-rule

```
for col = 1:9
    active_row = find(tickets(:,col) == 1); %Finding row numbers for indexing
    count = length(active_row);

    if count > 0
        if col == 1
            low = 1;
            high = 9;
        elseif col == 9
```

```

        low = 80;
        high = 90;
    else
        low = (col-1)*10;
        high = (col*10)-1;
    end
end

nums = sort(randi([low high], 1, count));
for k = 1:count
    tickets(active_row(k), col) = nums(k);
end
end

colCount = sum(tickets ~= 0, 1);

```

```
end
```

Displaying tickets

```

fprintf('----- TAMBOLA TICKET -----\\n\\n');

for r = 1:3
    for c = 1:9
        if tickets(r,c) == 0
            fprintf('[   ]');
        else
            fprintf('[%2d]', tickets(r,c));
        end
    end
    fprintf('\\n');
end

```

----- TAMBOLA TICKET -----

```
[   ][16][   ][31][   ][52][   ][70][84]
[ 3][   ][26][39][49][   ][74][   ]
[   ][   ][28][   ][59][60][74][87]
```
