

# Generating Tambola Tickets

Anubhav Rathore Lab Assignment - 2

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## 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('\n----- 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]

```