

%Part 1: Draw a filled circle

```
n = 15;      %n*n matrix
r = 6.5;     %radius = 6.5
x = repmat( 1:n, n,1);
y = x';
d = sqrt((x-(n+1)/2).^2 + (y-(n+1)/2).^2); %distance
a = zeros(n,n);
a(d<r) = 1;
fprintf([repmat('%d',1,n) '\n'],a);%print
```

%Part 2: Pascal Triangle

```
n = 5;
p= 1;
disp(p);
if n>1
    for i = 2 : n
        p = [p 0]+[0 p];
        disp(p);
    end
end
```