

Advent of Code

--- Day 8: Space Image Format ---

Part 1:

```
clear; clc;  
x='2022012220222222222222222222222210222222222221222202022222202222222222222222222122220022102222222222';  
px=(length(x)/25)/6;  
C={}; con=1; z1=[];  
for i=1:1:px  
    temp=zeros(6,25);  
    for i1=1:1:6  
        for i2=1:1:25  
            temp(i1,i2)=str2double(x(con));  
            con=con+1;  
        end  
    end  
    C{i,1}=temp;  
    z1(i,1)=length(find(temp==0));  
end  
[p,q]=min(z1);  
fprintf('The layer with fewest 0 digits is the layer %d\n',q);
```

The layer with fewest 0 digits is the layer 15

```
temp1=C{q,1};
an=length(find(temp1==2))*length(find(temp1==1));
disp(an)
```

2520

Part 2:

```
fimg=zeros(6,25,3); w=[255,255,255]; b=[0,0,0];
imgf=C{1,1};
for j=2:1:length(C)
    imgf(:, :, j)=C{j,1};
end
for j1=1:1:6
    for j2=1:1:25
        for j3=1:1:100
            if imgf(j1,j2,j3)==0
                fimg(j1,j2,:)=b;
                break
            elseif imgf(j1,j2,j3)==1
                fimg(j1,j2,:)=w;
                break
            end
        end
    end
end
imshow(fimg)
```

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