1. Consider the matlab code:

```matlab
for i=1:8
    for j=1:8
        x(i,j) = 1 + i + 2*j;
        y(i,j) = -1 -2*i;
        z(i,j) = -j;
    end
end
surf(x,y,z)
```

What does it plot? What happens if you replace `surf(x,y,z)` by `plot3(x,y,z)`. Explore `reshape(X, m, n)`

2. Consider the code `gaussp.m` [provided]. Transform this code so that it yields the standard echelon form for an \( m \times n \) matrix with \( m \geq n \), when all columns are pivot columns.