## Práctica 4:

# Programación en MATLAB/OCTAVE

Juan Jesús Carmona Tejero

Todos realizados menos el ejercicio 10 y 11

### <u>Ejercicio 1</u>

#### <u>Ejercicio 4</u>

<u>Ejercicio 5</u>

### <u>Ejercicio 6</u>

```
clc
A=[1\ 2\ 1\ 0;\ 2\ 1\ -1\ 1;\ 1\ 3\ -1\ 1];
V=[0\ 0\ 0\ 0];
disp('Matriz original');
disp(A);
format rat;
V(1,:)=A(1,:);
A(1,:)=A(2,:);
A(2,:)=V(1,:);
fprintf('El primer pivote: %d\n',A(1,1));
A(2,:)=A(1,:)*(-1/2)+A(2,:);
A(3,:)=A(1,:)*(-1/2)+A(3,:);
V(1,:)=A(2,:);
A(2,:)=A(3,:);
A(3,:)=V(1,:);
fprintf('El segundo pivote: %f\n',A(2,2));
A(3,:)=A(2,:)*(-3)+A(3,:)*5;
A(2,:)=A(2,:)/(5/2);
A(3,:)=A(3,:)*(1/9);
fprintf('El tercer pivote: \%f\n',A(3,3));
A(2,:)=A(2,:)+A(3,:)*(1/5);
A(1,:)=A(1,:)/2;
fprintf('Cuarto pivote: %f\n',A(2,2));
A(1,:)=A(1,:)+A(2,:)*(-1/2);
fprintf('Quinto pivote: %f\n',A(3,3));
```

fprintf('Matriz reducida: \n'); A(1,:)=A(1,:)+A(3,:)\*(1/2)

#### <u>Ejercicio 9</u>