**LUCRARE 2**

**Lab2 ex1:**

X=[1 0 2;0 0 1;0 0 4];

any(X)

all(X)

any(X>-1)

**Lab 2 ex2:**

a=[3 2 -1;-1 3 2;1 -1 -1]

b=[10;5;-1]

x=a\b

**Lab2 ex3:**

f=[4 0 -2 0 3 -1 4]

g=[0 0 0 0 2 5 -16]

%punctul a%

s=f+g

%punctul b%

f=[4 0 -2 0 3 -1 4]

g=[0 0 0 0 2 5 -16]

a=polyval(f,3)-polyval(g,7)

%punctul c%

f=[4 0 -2 0 3 -1 4]

g=[2 5 -16]

a=conv(f,g)

[b,r]=deconv(f,g)

c=polyval(f,3)\*polyval(g,7)

%punctul d%

f=[4 0 -2 0 3 -1 4]

g=[0 0 0 0 2 5 -16]

b=a'

d=polyder(conv(f,g))

%punctul e%

e=roots(f)

**Lab 2 e4:**

a=[1, 0,1];

b=[1,2,-2];

[r,p,k]=residue(b,a)

**Lab 2 ex5:**

g=[11 12;4 6]

i=eye(2,2)

a=ones(2,2)

b=2\*g

h=[g i;b a]

**Lab 2 ex6:**

a=[11 12 13 14;2 3 4 5;21 22 23 24;31 32 33 34]

b=[a(2,2) a(2,3) a(2,4)]

c=a(2,:)

d=[a(1,:);a(2,:)]

A=a(:,4:-1:1)

a(:,2)=[]

e=a(:)