importmath

importrandom

importnumpyasnp

a = np.matrix([[1,2,3],[1,3,4],[2,-1,-1]])

b = np.matrix([[5],[6],[1]])

def gauss(a,b):

n = len(b)

for k inrange(1,n):

for i inrange(k+1,n):

ifa[i,k] !=0.0:

a[i,k:n]=a[i,k:n]-a[i,k]/a[k,k]\*a[k,k:n]

b[i]=b[i]-a[i,k]/a[k,k]\*b[k]

for k inrange(n-1,-1,-1):

b[k]=(b[k]- np.dot(a[k,k:n],b[k:n]))/a[k,k]

print("Check", np.linalg.solve(a,b))

print("Method of Jordan Gauss", np.linalg.inv(a)\*b)

returnb

print(gauss(np.matrix([[1,2,3],[1,3,4],[2,-1,-1]]),np.matrix([[5],[6],[1]])))

