

c Eliminacion de Gauss

```
dimension a(5,6), b(5,6), y(5), x(5)
```

```
y(1) = 0.468
```

```
y(2) = 0.695
```

```
y(3) = 0.398
```

```
y(4) = 0.913
```

```
y(5) = 0.483
```

```
a(1,1) = 0.546
```

```
a(1,2) = 0.447
```

```
a(1,3) = 0.242
```

```
a(1,4) = 0.194
```

```
a(1,5) = 0.795
```

```
a(2,1) = 0.380
```

```
a(2,2) = 0.276
```

```
a(2,3) = 0.581
```

```
a(2,4) = 0.108
```

```
a(2,5) = 0.416
```

```
a(3,1) = 0.721
```

```
a(3,2) = 0.022
```

```
a(3,3) = 0.853
```

```
a(3,4) = 0.068
```

```
a(3,5) = 0.312
```

```
a(4,1) = 0.151
```

```
a(4,2) = 0.759
```

```
a(4,3) = 0.186
```

```
a(4,4) = 0.597
```

```
a(4,5) = 0.757
```

```
a(5,1) = 0.192
```

```
a(5,2) = 0.509
```

```
a(5,3) = 0.041
```

```
a(5,4) = 0.411
```

```
a(5,5) = 0.632
```

```
a(1,6) = y(1)
```

```
a(2,6) = y(2)
```

```
a(3,6) = y(3)
```

```
a(4,6) = y(4)
```

```
a(5,6) = y(5)
```

```
open(55,file='egauss.out',status='unknown')
```

```
call gauss(a, 5, 6, 5)
```

```

call m_display (a, 5, 6)

stop
end

subroutine gauss(a,n,m,ldim)
dimension t(1000),a(ldim,1)
do 10 i=1,n-1
con=1./a(i,i)
do 5 k=1,m+1-i
5 t(k)=-con*a(i,k+i-1)
call elim (a(i,i),t,n-i,m+1-i,ldim,con)
10 continue
return
end

subroutine elim(a,t,nn,m,ldim,con1)
dimension a(ldim,1),t(1)
do 4 i=2,nn+1
con=a(i,1)
do 3 j=1,m
3 a(i,j)=a(i,j)+con*t(j)
!a(i,1)=con1*con
4 continue
return
end

subroutine m_display (a, l_row, l_col)

dimension a(l_row, l_col)
do i=1,l_row
print 10,(a(i,j),j=1,l_col)

write(55,10) (a(i,j),j=1,l_col)

10 format (6F10.3)
enddo

print *, ""
return
end

```