

```
A=[1,1,1;2,-1,-1;4,-2,1]
```

```
A =
```

```
    1    1    1
    2   -1   -1
    4   -2    1
```

```
b=[6;-3;3]
```

```
b =
```

```
    6
   -3
    3
```

```
function x = solveGauss(A,b)
```

```
s = length(A);
```

```
for j = 1:(s-1)
```

```
    for i = s:-1:j+1
```

```
        m = A(i,j)/A(j,j);
```

```
        A(i,:) = A(i,:) - m*A(j,:);
```

```
        b(i) = b(i) - m*b(j);
```

```
    end
```

```
end
```

```
x = zeros(s,1);
```

```
x(s) = b(s)/A(s,s);
```

```
for i = s-1:-1:1
```

```
    sum = 0;
```

```
    for j = s:-1:i+1
```

```
        sum = sum + A(i,j)*x(j);
```

```
    end
```

```
    x(i) = (b(i) - sum)/A(i,i);
```

```
end
```

Command:

**solveGauss (A,b)**

Result:

i=3 j=1

A=

1 1 1

2 -1 -1

0 -6 -3

6

-3

-21

i=2 j=1

A=

1 1 1

0 -3 -3

0 -6 -3

6

-15

-21

i=3 j=2

A=

1 1 1

0 -3 -3

0 0 3

6

-15

9

ans =

1

2

3

>>