

```
SUBROUTINE SOLVE(N);  
! Rozwiazanie ukladu rownan metoda Gaussa
```

```
! Zmienne globalne:  
! C(N,N) - macierz  
! Y(N) - wektor obciazen  
! X(N) - wektor niewiadomyh
```

```
integer :: N,NB,J,L,JJ,I;  
real*8 :: Xm,SUM;
```

```
    NB=N-1;  
    do J=1 , NB  
        L = J+1;  
        do JJ=L , N  
            XM = C(JJ,J)/C(J,J);  
            do I=J,N  
                C(JJ,I) = C(JJ,I) - C(J,I)*XM;  
            end do;  
            Y(JJ) = Y(JJ) - Y(J)*XM;  
        end do;  
    end do;
```

```
X(N) = Y(N)/C(N,N);
```

```
    do J=1,NB  
        JJ = N-J;  
        L = JJ+1;  
        SUM = 0.0;  
        do i = L , N  
            SUM = SUM + C(JJ,I)*X(I);  
        end do;  
        X(JJ) = (Y(JJ) - SUM) / C(JJ,JJ);  
    end do;
```

```
END SUBROUTINE SOLVE;
```