

```

function
[mreza,cvorovi,generatori,transformatori,kompenzatori,Vpqrmin,Vpqrmax,Sbase]=Caso_9Bus
load bus.mat
%-----

```

```

Sbase=100; %MVA, Bazna snaga sistema

```

```

    %|cvor i->cvor j | tipel | r      | x      | b      | t      | Smax
| redbr |
mreza=[1      4      2      0      0.0576  0      1      1
1
      4      5      1      0.017   0.0920  0.158   1      1
2
      5      6      1      0.0390  0.1700  0.3580  1      1
3
      3      6      2      0      0.0586  0      1      1
4
      6      7      1      0.0119  0.1008  0.2090  1      1
5
      7      8      1      0.0085  0.0720  0.1490  1      1
6
      8      2      2      0      0.0625  0      1      1
7
      8      9      1      0.0320  0.1610  0.3060  1      1
8
      9      4      1      0.01    0.085   0.176   1      1
9];

```

```

    % | cvor | tip |      napon      | ugao | Pgen | Qgen | Ppot |
Qpot  | Yot  | Vbase |
cvorovi=[1      0      16.5  | 1      0      0      0      0
0      2      18      | 1      0      1.63  0      0
0      3      13.8   | 1      0      0.85  0      0
0      4      230    | 1      0      0      0      0
0      5      230    | 1      0      0      0      0.90
0.30   0      230    | 1      0      0      0      0.00
0.00   0      230    | 1      0      0      0      1.00
0.35   0      230    | 1      0      0      0      0.00
0.00   0      230    | 1      0      0      0      0.00

```

```

0.50      9      2      1      0      0      0      1.25
          0      230];

```

```

%-----

```

```

Vpqrmin=0.95; Vpqrmax=1.05;

```

```

      % | cvor | Vgmin | Vgmax | Pgmin | Pgmax | Qgmin | Qgmax | a |
b   | c |
generatori=[1      0.95  1.05  0.10  2.50  -3.00  3.00  150
5     0.11
          2      0.95  1.05  0.10  3.00  -3.00  3.00  600
1.2  0.085
          3      0.95  1.05  0.10  2.70  -3.00  3.00  335
1     0.1225];

```

```

generatori(:,9)=generatori(:,9)*Sbase;
generatori(:,10)=generatori(:,10)*Sbase^2;
generatori(:,11)=0; %koeficijenti d
generatori(:,12)=0; %koeficijenti e

```

```

      %|redbrt| tmin | tmax | bus_i| bus_j|
transformatori=[1      0.95  1.05  1      4
                4      0.95  1.05  3      6
                7      0.95  1.05  8      2];

```

```

      % | cvor | Qgmin | Qgmax |
%kompenzatori=[5      0      10];
kompenzatori=[x1      0      100
              x2      0      100];

```

```

return

```