

```

clear all; close all; clc

g = 1.4;

load U.mat;

for i=1:size(U,1)
    W(i,:)=U2W(U(i,:),g);
    lambda(i,:)=eigsEuler(U(i,:),g);
    F(i,:)=fluxEuler(U(i,:),g);
end

fprintf('\n\n--- W ----');
for i=1:size(U,1)
    fprintf('\n %12.3e %12.3e %12.3e',W(i,1:3));
end
fprintf('\n');

fprintf('\n\n--- lambda ----');
for i=1:size(U,1)
    fprintf('\n %12.3e %12.3e %12.3e',lambda(i,1:3));
end
fprintf('\n');

fprintf('\n\n--- F ----');
for i=1:size(U,1)
    fprintf('\n %12.3e %12.3e %12.3e',F(i,1:3));
end
fprintf('\n');

```

--- W ----

1.000e+00	7.500e-01	1.000e+00
1.000e+00	-2.000e+00	4.000e-01
1.250e-01	0.000e+00	1.000e-01
5.992e+00	-6.196e+00	4.609e+01
1.000e+00	-1.960e+01	1.000e-02

--- lambda ----

1.933e+00	7.500e-01	-4.332e-01
-1.252e+00	-2.748e+00	-2.000e+00
0.000e+00	1.058e+00	-1.058e+00
-9.478e+00	-2.915e+00	-6.196e+00
-1.948e+01	-1.960e+01	-1.972e+01

--- F ----

7.500e-01	1.563e+00	2.836e+00
-2.000e+00	4.400e+00	-6.800e+00
0.000e+00	1.000e-01	0.000e+00
-3.713e+01	2.762e+02	-1.712e+03
-1.960e+01	3.841e+02	-3.764e+03