```
% FEMLAB Model M-file
% Generated by FEMLAB 3.0a (FEMLAB 3.0.0.228, $Date: 2004/04/05 18:04:31 $)
% Some geometry objects are stored in a separate file.
% The name of this file is given by the variable 'flbinaryfile'.
%                                                  programmed by 木　澤
clc
clear all

flclear fem

% Femlab version
clear vrsn
vrsn.name = 'FEMLAB 3.0';
vrsn.ext = 'a';
vrsn.major = 0;
vrsn.build = 228;
vrsn.rcs = '$Name:  $';
vrsn.date = '$Date: 2004/04/05 18:04:31 $';
fem.version = vrsn;

flbinaryfile='plate_reidai3_1.flm';

% Constants
fem.const={'disturb','1'};

% Geometry
clear draw
g2=flbinary('g2','draw',flbinaryfile);
draw.p.objs = {g2};
draw.p.name = {'PT1'};
draw.p.tags = {'g2'};
g1=flbinary('g1','draw',flbinaryfile);
draw.s.objs = {g1};
draw.s.name = {'R1'};
draw.s.tags = {'g1'};
fem.draw = draw;
fem.geom = geomcsg(fem);

% Initialize mesh
fem.mesh=meshinit(fem);

% (Default values are not included)

% Application mode 1
clear appl
appl.mode.class = 'SmeMindlin';
appl.assignsuffix = '_drm';
clear prop
prop.analysis='eigen';
appl.prop = prop;
clear pnt
pnt.Fz = {0,'-disturb'};
pnt.ind = [1,1,2,1,1];
appl.pnt = pnt;
clear bnd
bnd.constrlocaltype = {'free','fixed'};
bnd.ind = [2,1,1,1];
appl.bnd = bnd;
clear equ
equ.E = 2.06e11;
equ.rho = 7870;
equ.nu = 0.3;
equ.thickness = 0.006;
equ.ind = [1];
appl.equ = equ;
fem.appl{1} = appl;

% Multiphysics
fem=multiphysics(fem);

% Extend mesh
fem.xmesh=meshextend(fem);
```

```
% Solve problem
fem.sol=femeig(fem, ...
               'solcomp',{'thx','w','thn_drm','thy'}, ...
               'outcomp',{'thx','w','thn_drm','thy'});

% Save current fem structure for restart purposes
fem0=fem;

% Plot solution
figure(1)
postplot(fem, ...
         'tridata',{'w','cont','internal'}, ...
         'triz','w', ...
         'trimap','jet(1024)', ...
         'deformsub',{'thx','thy'}, ...
         'lindata',{'w','cont','internal'}, ...
         'linmap','jet(1024)', ...
         'deformbnd',{'thx','thy'}, ...
         'solnum',1, ...
         'title','eigfreq_drm(1)=87.918871    Surface: z-displacement   Height: z-displacement   Boundar ↙
y: z-displacement   Displacement: Rotation', ...
         'refine',3, ...
         'axisequal','off', ...
         'grid','on');

%////////////////////////////以下修正部分//////////////////////////////

%/// 固有振動数の取得について////
freq_1mode=sqrt( fem.sol.lambda(1) ) /(2*pi)      %1次モード[Hz]
freq_allmode=sqrt( fem.sol.lambda) /(2*pi)        %1次～6次モード[Hz]
```