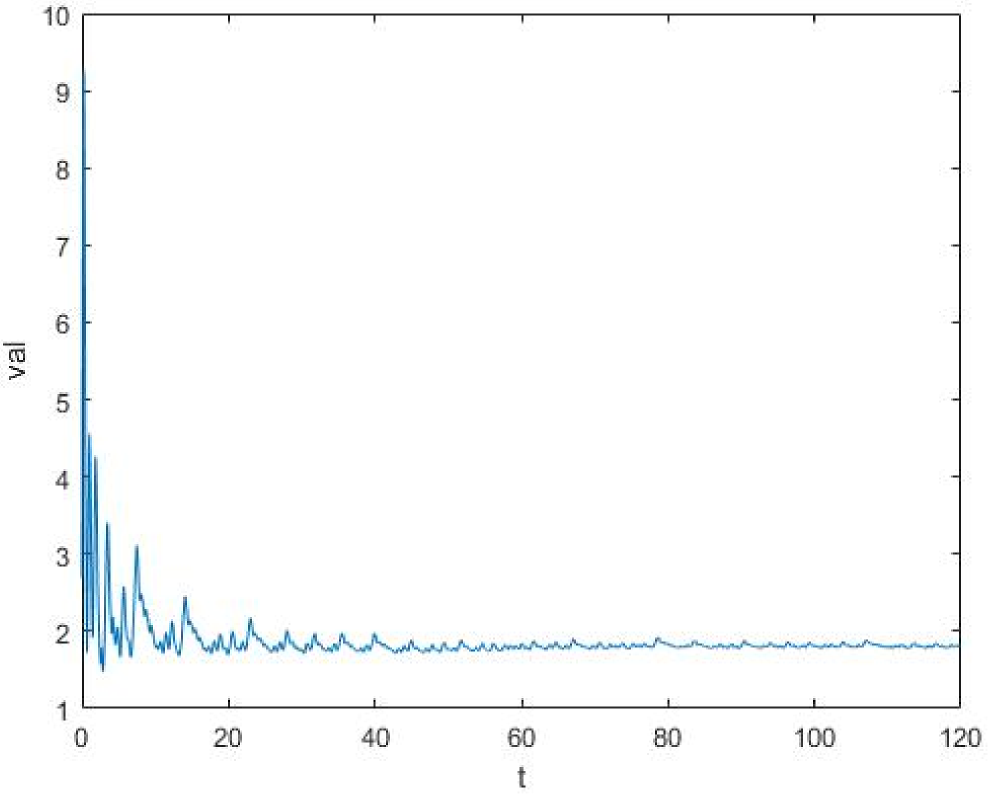
```matlab
function res = RK4ND(f, X0, h, t)
% RK4 method in N dimentional case;
% f: cell array of functions;
% X0: 1*N array of initial values;
% h: step size;
% t = [t0, t1]: time periods;

t0 = t(1)-h; t1 = t(2);
N = length(X0); nstep = (t1-t0)/h;
if N ~= length(f)
    error('Dimension of function and initial values do not agree');
end

res = zeros(nstep, N);
for i = 1:nstep
    t0 = t0+h;
    res(i, :) = X0;
    X1 = X0;
    X2 = zeros(1, N);
    for j = 1:N
        X2(j) = feval(f{j}, t0, X1);
    end
    X2 = X0 + h/2*X2;
    X3 = zeros(1, N);
    for j = 1:N
        X3(j) = feval(f{j}, t0+h/2, X2);
    end
    X3 = X0 + h/2*X3;
    X4 = zeros(1, N);
    for j = 1:N
        X4(j) = feval(f{j}, t0+h/2, X3);
    end
    X4 = X0 + h*X4;
    for j = 1:N
        X0(j) = X0(j) + h/6*(feval(f{j}, t0, X1)...
                            + 2*feval(f{j}, t0+h/2, X2)...
                            + 2*feval(f{j}, t0+h/2, X3)...
                            + feval(f{j}, t0+h, X4));
    end
end
```

```matlab
s = 10; b = 8/3; r = 28;
h = 0.004; t = [0, 120];

f1 = @(t, X) s*(X(2)-X(1));
f2 = @(t, X) r*X(1)-X(2)-X(1)*X(3);
f3 = @(t, X) -b*X(3)+X(1)*X(2);
f4 = @(t, X) -s*X(4)+s*X(5);
f5 = @(t, X) (r-X(3))*X(4)-X(5)-X(1)*X(6);
f6 = @(t, X) X(2)*X(4)+X(1)*X(5)-b*X(6);
f = {f1, f2, f3, f4, f5, f6};
X0 = [-8, 8, r-1, sqrt(2)/6, 5/6, 1/2];

res = RK4ND(f, X0, h, t);
tt = (t(1):h:t(2))';
val = res(:, 4:end);
v = log(sum(val.*val, 2))./tt;
plot(tt, v);
xlabel('t');
ylabel('val');
```


10
9
8
7
6
5
4
3
2
1
val
0
20
40
60
80
100
120
t