global Np;

Np = 10;

global Nc;

Nc = 2;

global Qy;

Qy = 1\*eye(1\*Np);

global Qx;

Qx = 1\*eye(2\*Np);

global R;

R = 1\*eye(2\*Nc);

Chart, line chart

Description automatically generated

global Np;

Np = 100;

global Nc;

Nc = 2;

global Qy;

Qy = 1\*eye(1\*Np);

global Qx;

Qx = 1\*eye(2\*Np);

global R;

R = 1\*eye(2\*Nc);

Chart, line chart

Description automatically generated with medium confidence

global Np;

Np = 10;

global Nc;

Nc = 10;

global Qy;

Qy = 1\*eye(1\*Np);

global Qx;

Qx = 1\*eye(2\*Np);

global R;

R = 1\*eye(2\*Nc);

Chart, line chart

Description automatically generated

global Np;

Np = 10;

global Nc;

Nc = 2;

global Qy;

Qy = 100\*eye(1\*Np);

global Qx;

Qx = 1\*eye(2\*Np);

global R;

R = 1\*eye(2\*Nc);

Chart, line chart

Description automatically generated

%% model predictive control parameters

global Np;

Np = 10;

global Nc;

Nc = 2;

global Qy;

Qy = 1\*eye(1\*Np);

global Qx;

Qx = 1\*eye(2\*Np);

global R;

R = 100\*eye(2\*Nc);

A picture containing text, sky, different, colorful

Description automatically generated