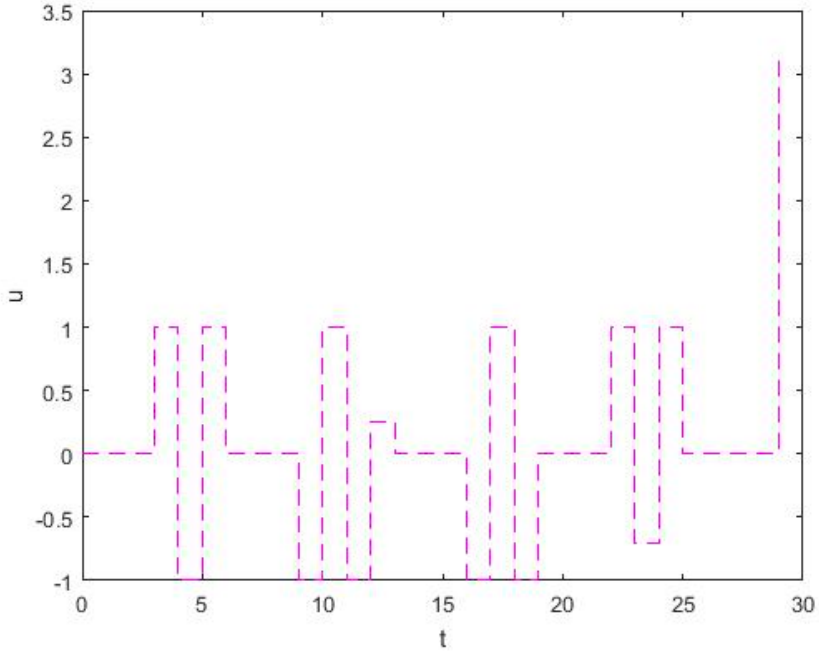


```
A=[ -1 0.4 0.8; 1 0 0 ; 0 1 0];
b=[ 1 0 0.3]';
x0 = [0 0 0]';
xdes = [ 7 2 -6]';
cvx_begin
      variable X(3,31);
      variable u(1,30);
      minimize (sum(max(abs(u),2*abs(u)-1)))
      subject to
      X(:,2:31) == A*X(:,1:30)+b*u;
      X(:,1) == x0;
      X(:,N+1) == xdes;
cvx_end
stairs(0:29,u, 'm—')
xlabel('t')
ylabel('u')
```