Lab3

Control
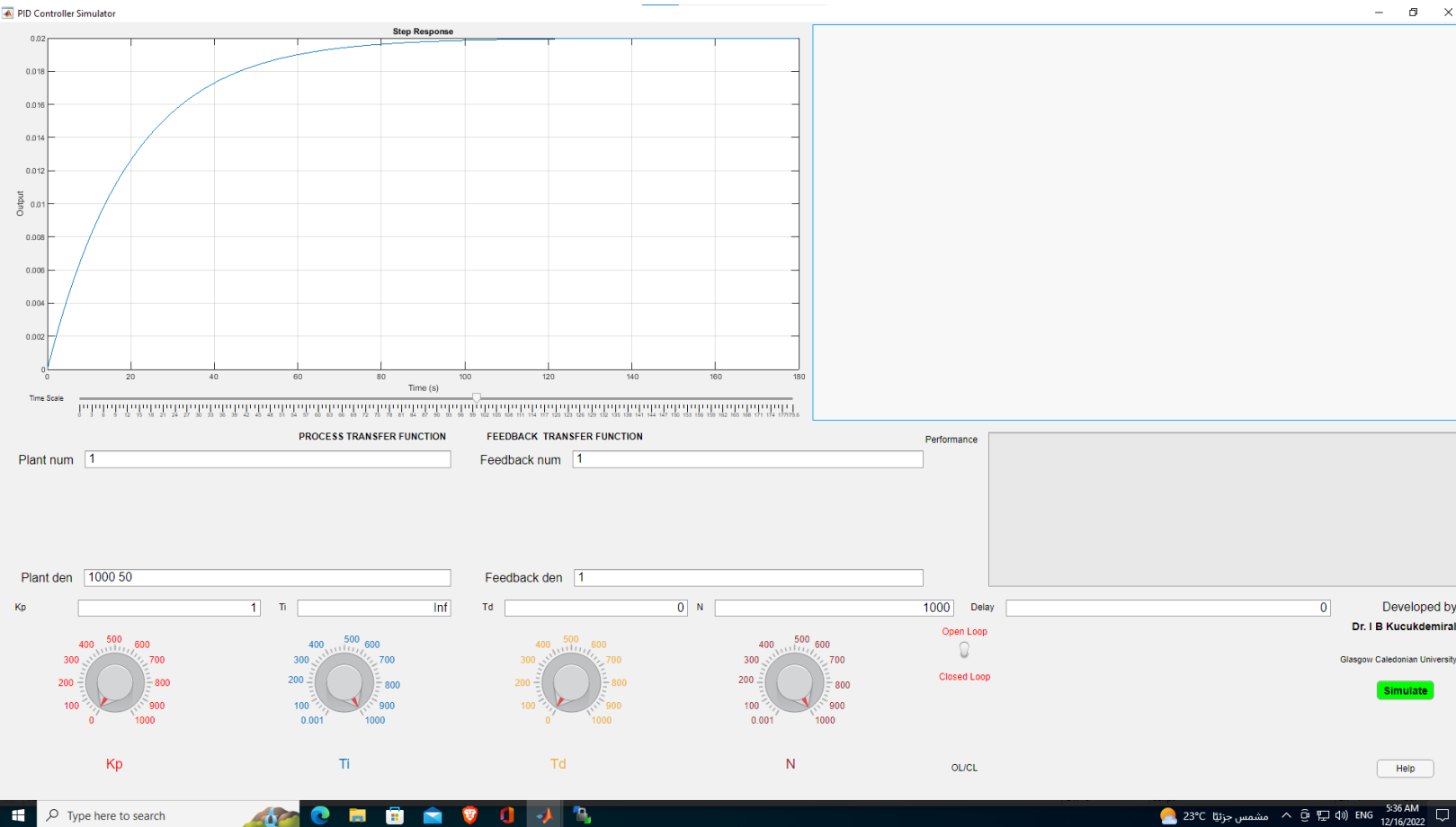

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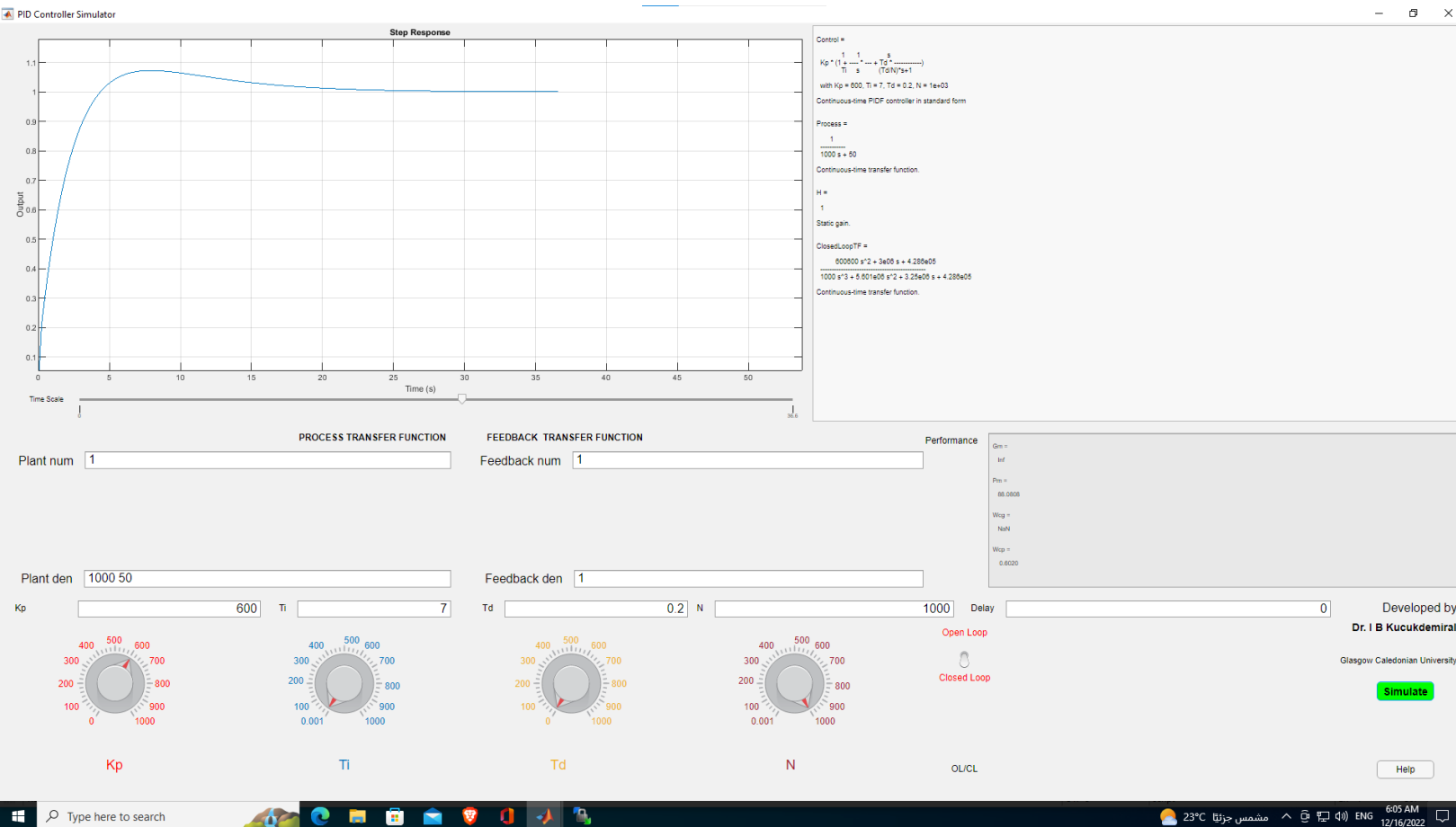
Open loop step response

PID Simulator Controller
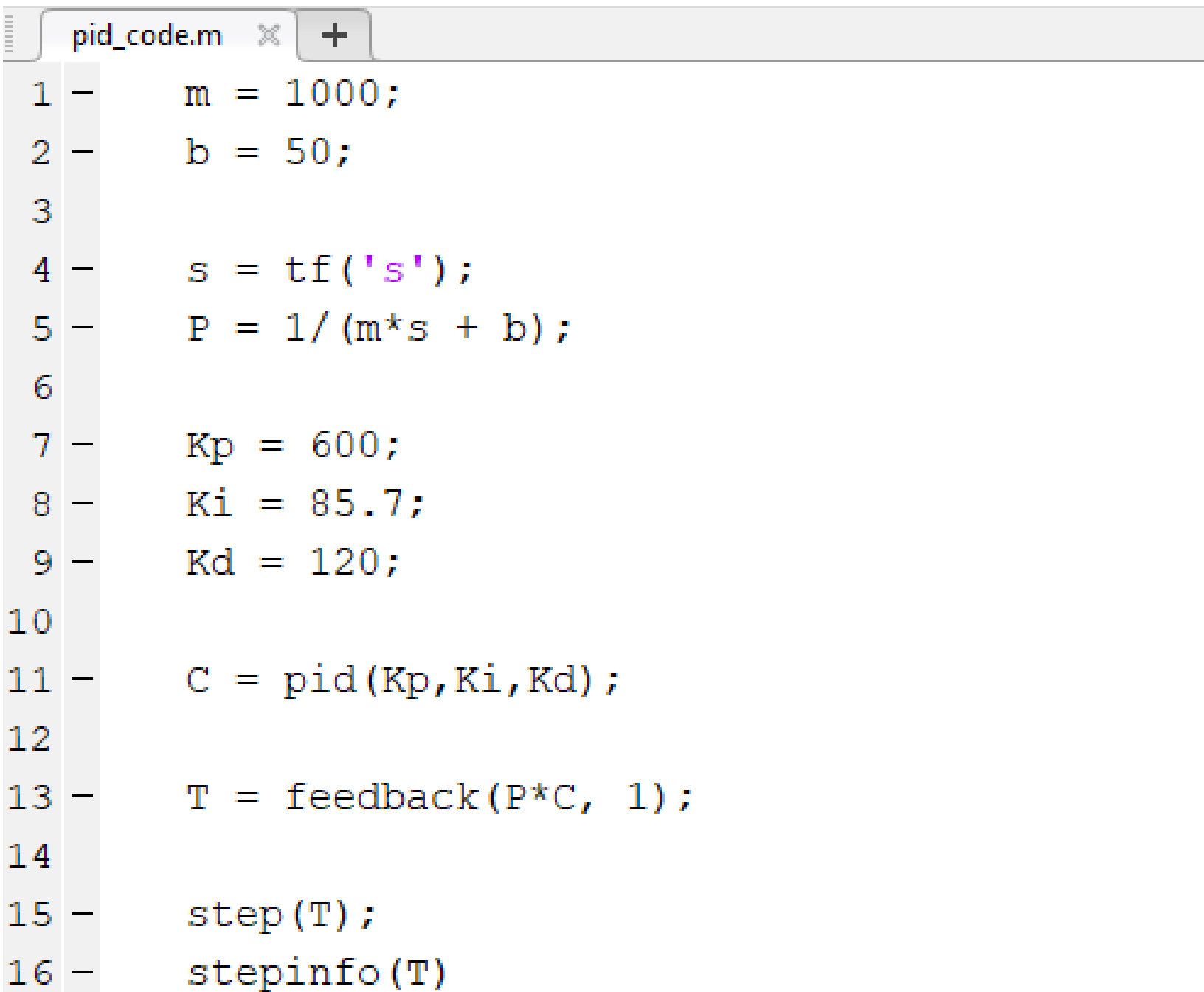
Kp=600, Ki=85.7 ,Kd=120

PID Matlab Code

Kp=600, Ki=85.7 ,Kd=120
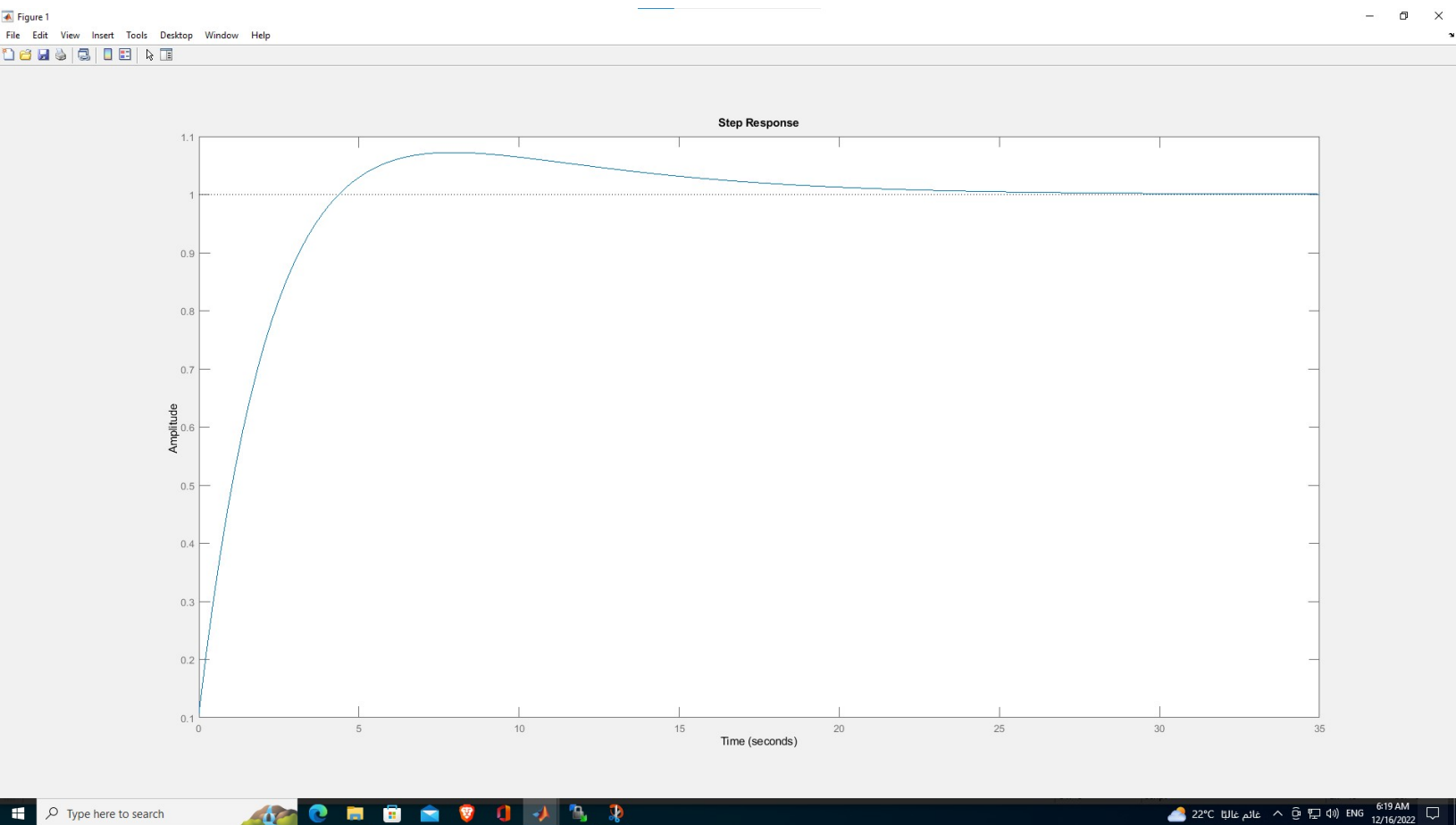
```
pid_code.m   +

1    m = 1000;
2    b = 50;
3
4    s = tf('s');
5    P = 1/(m*s + b);
6
7    Kp = 600;
8    Ki = 85.7;
9    Kd = 120;
10
11   C = pid(Kp,Ki,Kd);
12
13   T = feedback(P*C, 1);
14
15   step(T);
16   stepinfo(T)
```

PID Matlab Code

Kp=600, Ki=85.7 ,Kd=120

Step response:

Step information:


```
Command Window

New to MATLAB? See resources for Getting Started.

    struct with fields:

            RiseTime: 3.0302
        SettlingTime: 18.1697
         SettlingMin: 0.9291
         SettlingMax: 1.0724
           Overshoot: 7.2445
          Undershoot: 0
                Peak: 1.0724
            PeakTime: 7.9592

fx >>
```