```matlab
syms t s
f=t^2-2*cos(2*t)+exp(-3*t)+7
F=laplace(f,t,s);

pretty(F)
```
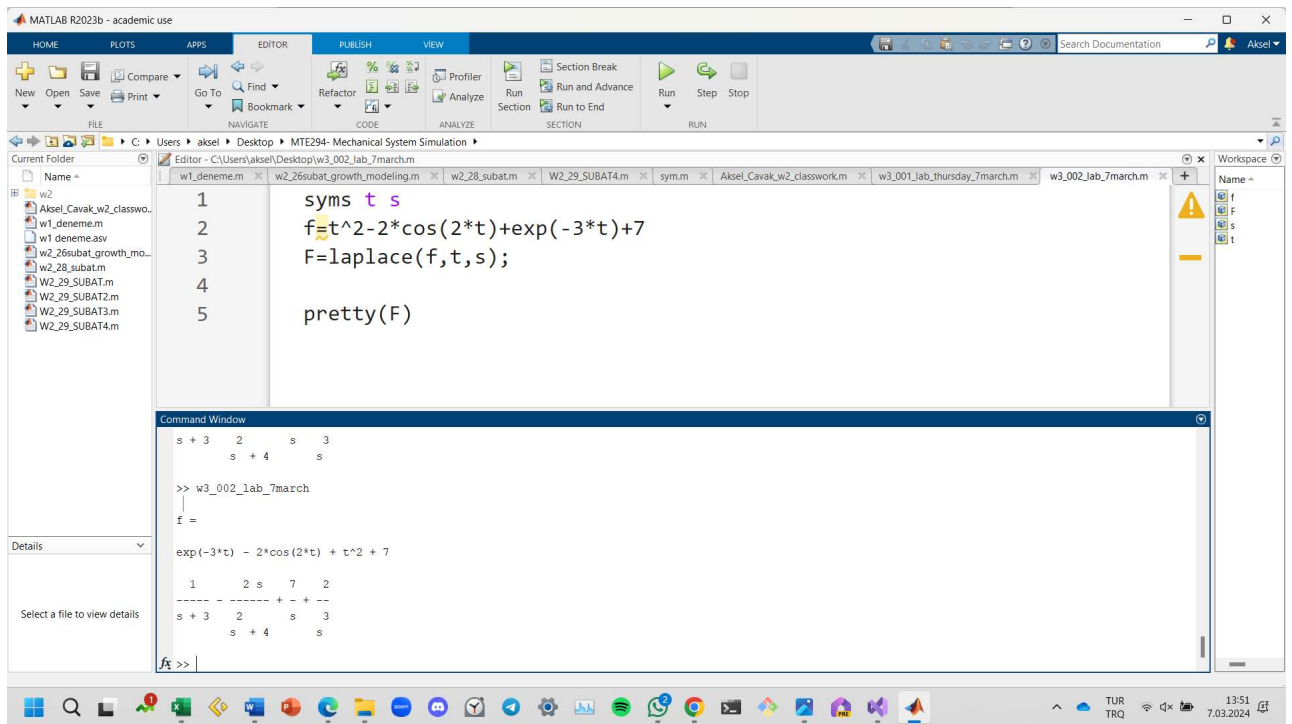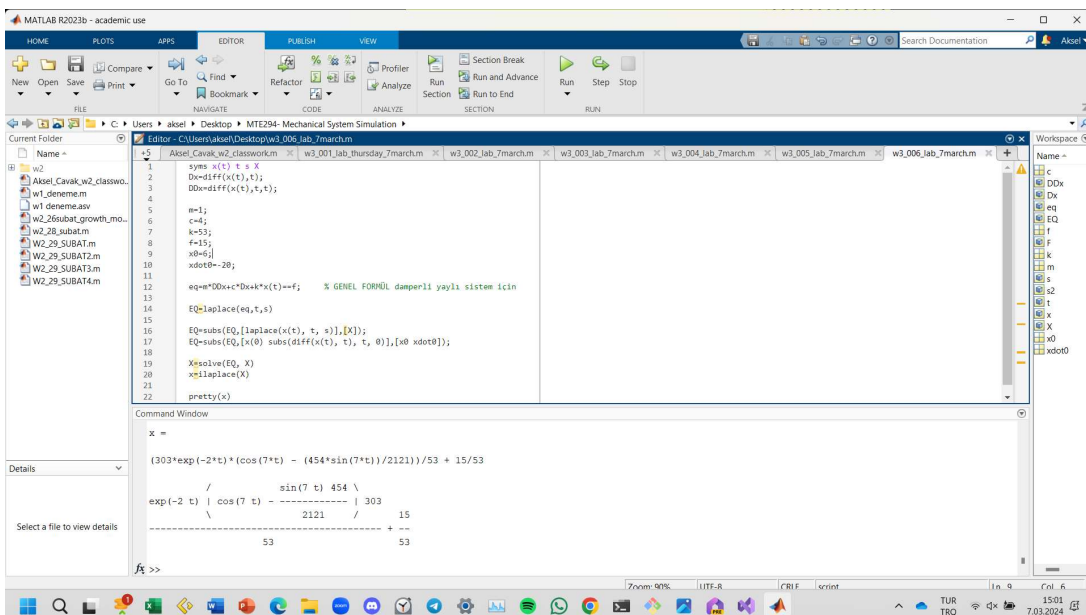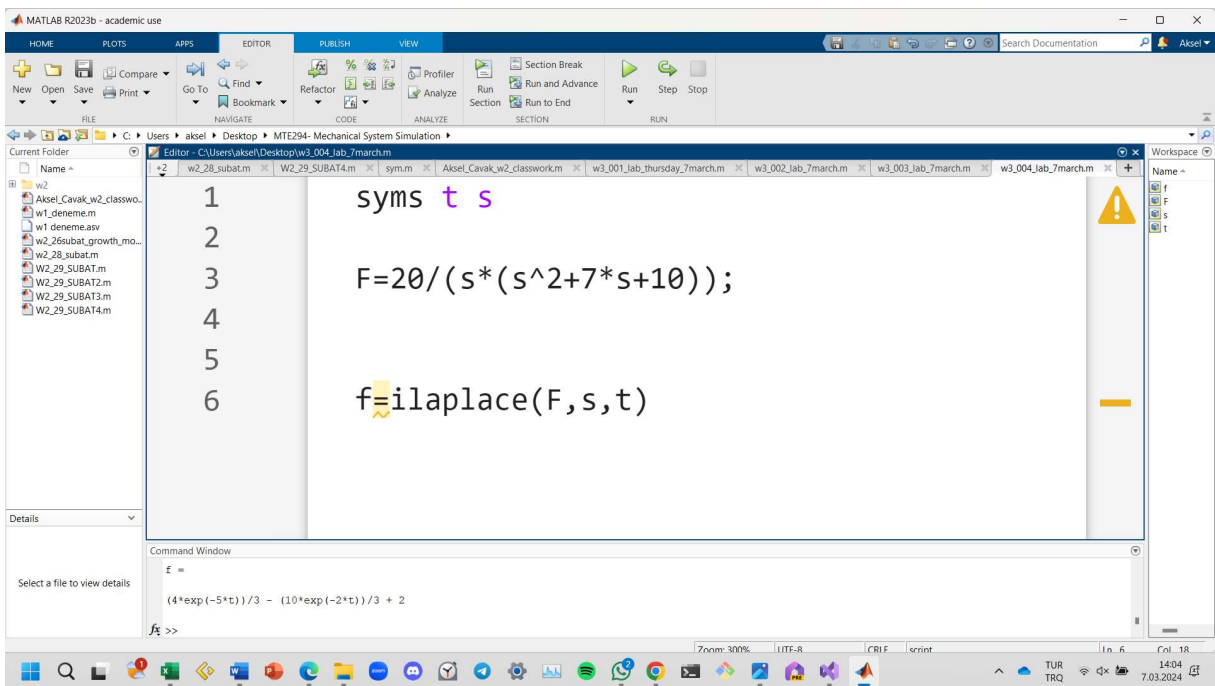
```matlab
syms t s

F=20/(s*(s^2+7*s+10));

f=ilaplace(F,s,t)
```
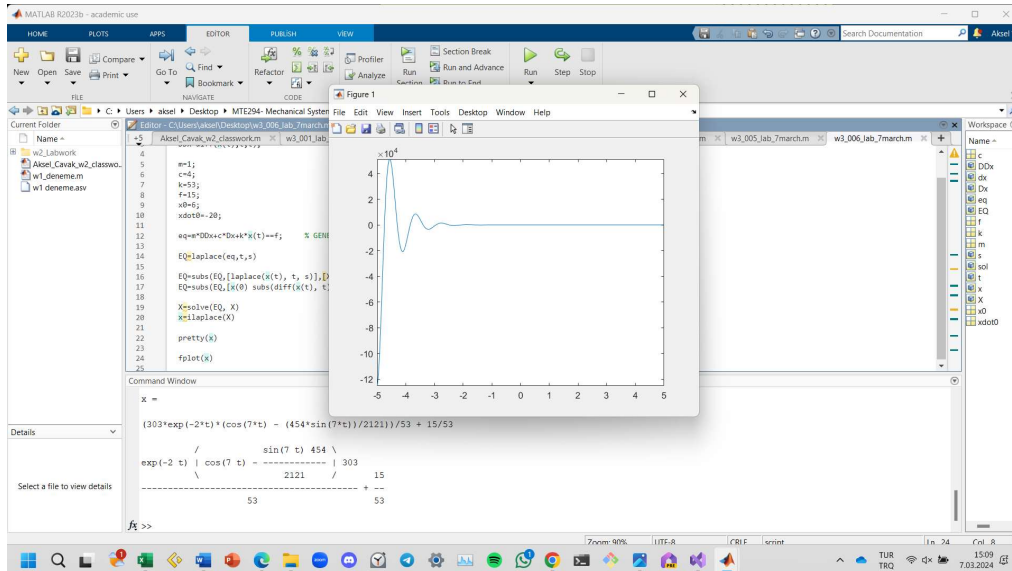
```matlab
syms x(t) t s X
Dx=diff(x(t),t);
DDx=diff(x(t),t,t);

m=1;
c=4;
k=53;
f=15;
x0=6;
xdot0=-20;

eq=m*DDx+c*Dx+k*x(t)==f;      % GENEL FORMÜL damperli yaylı sistem için

EQ=laplace(eq,t,s)

EQ=subs(EQ,[laplace(x(t), t, s)],[X]);
EQ=subs(EQ,[x(0) subs(diff(x(t), t), t, 0)],[x0 xdot0]);

X=solve(EQ, X)
x=ilaplace(X)

pretty(x)
```

```
[t, x]=ode45(@func,[0 10],[6 0]);
hold on
plot(t,x, '*');

function dxdt=func(t,x);
dxdt=[x(2); 68- (34)*x(1)-6*x(2)];
end
```