

```
coeff = polyfit(t,y,9)
xn = linspace(0,10,1000);
yn = polyval(coeff,xn);
plot(xn,yn)
xlabel('t--->');
ylabel('y--->');
hold on
plot(t,y,'*')
hold off

% coeff = 0.0001    -0.0037    0.0427    -0.1616    -0.7653    9.8373    -38.9788    71.9967 ✓
-57.8076    13.6239
```