```
close all; clear all; clc;
%task 2
Vr = [1 2 3 4 5 6 7 8 9 10];
Pr = [.1 .38 .92 1.58 2.53 3.71 4.83 6.36 8.09 10.1];
n = length(Vr);
A = [n sum(Vr) sum(Vr.^2);sum(Vr) sum(Vr.^2) sum(Vr.^3);sum(Vr.^2) sum(Vr.↙
^3) sum(Vr.^4)];
X = [];
Y = [sum(Pr); sum(Pr.*Vr); sum(Pr.*(Vr.^2))];
X = Y\A;
a0 = X(1)
a1 = X(2)
a2 = X(3)
yid = a0+a1.^Vr+a2.*(Vr.^2);
plot(Vr,yid./100,'r',Vr,Pr,'o');
```