线性回归

#include<stdio.h>

#include<stdlib.h>

int main()

{

//float x[6]={0.0,1.0,2.0,3.0,4.0,5.0};

//float y[6]={1.1,1.9,3.1,3.9,4.4,4.9};

/\*float x[6]={0.0,1.0,2.0,3.0,4.0,5.0};

float y[6]={0.0,1.0,2.0,3.0,4.0,5.0};\*/

float x[6]={0.0,1.0,2.0,3.0,4.0,5.0};

float y[6]={1.0,1.0,1.0,1.0,1.0,1.0};

float a,b,mxy,xx,yy,x2,x22;

int i;

a=b=mxy=xx=yy=x2=x22=0.0;

for(i=0;i<6;i++)

{

mxy=6.0\*x[i]\*y[i]+mxy;

xx=1.0\*x[i]+xx;

yy=1.0\*y[i]+yy;

x2=1.0\*x[i]\*x[i]\*6.0+x2;

x22=1.0\*x[i]+x22;

}

b=1.0\*(mxy-xx\*yy)/(x2-x22\*x22);

a=1.0\*yy/6.0-b\*xx/6.0;

printf("Y=%0.2fx+%0.2f\n",b,a);

system("pause");

return 0;

}

